BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AF INSTRUCTION 11-2DVG VOLUME 3

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Flying Operations Procedures

C-22B/C-38A FLYING OPERATIONS PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 11-2, *Aircraft Rules and Procedures*. It establishes policy for the operation of 201 Airlift Squadron C-22B and C-38A aircraft to safely, comfortably, and reliably accomplish their worldwide mobility missions. This instruction makes use of AMC Forms 41, 43, 54, and 196. These forms are to be used as a workaround until said forms have been converted to AF forms. Once these forms have been converted to AF Forms a change to this instruction will follow to reflect the new form numbers. Maintain and dispose of all records created as a result of prescribed processes in this instruction in accordance with AFMAN 37-139, "Records Disposition Schedule."

Chapter 1

GENERAL INFORMATION

1.1. General.

1.1.1. This AFI provides guidelines for 201 AS C-22B and C-38A Operational Support Aircraft (OSA) operations and applies to aircrews flying the above Mission Design Series (MDS) aircraft and all management levels concerned with operation of 201 Airlift Squadron aircraft. It is a compilation of information from aircraft flight manuals, FLIP publications, and other Air Force directives, as well as an original source document for many areas. Basic source directives have precedence in the case of any conflicts, revisions, and matters of interpretation. For those areas where this AFI is the source document, waiver authority will be in accordance with paragraph **1.4.3.** For those areas where this AFI repeats information contained in other source documents, waiver authority will be in accordance with those source documents.

1.1.2. All units and agencies involved in or supporting 201 AS C-22B and C-38A OSA operations will use this AFI. Copies will be current and available to planning staffs from headquarters to aircrew level.

1.2. Applicability. This AFI is applicable to all individuals operating 201 AS C-22B and C-38A aircraft.

1.3. Terms Explained.

1.3.1. "Will" and "shall" indicate a mandatory requirement.

1.3.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.

1.3.3. "May" indicates an acceptable or suggested means of accomplishment.

1.3.4. "Note" indicates operating procedures, techniques, etc. that are considered essential to emphasize.

1.4. Deviations and Waivers. Do not deviate from the policies and guidance in this AFI under normal circumstances, except:

1.4.1. For safety.

1.4.2. When it is necessary to protect the crew or aircraft from a situation not covered by this AFI and immediate action is required, the Aircraft Commander has ultimate authority and responsibility for the course of action to be taken. Report all deviations or exceptions without waiver through channels to ANG/DO.

1.4.3. Unless otherwise directed in this AFI, waiver authority for the contents of this document is ANG/DO. Waiver requests will be approved by ANG/DO prior to AMC consideration. Due to the unique missions of the 201 AS, waiver authority for specific areas is delegated to the 201 AS/CC.

1.4.4. All deviations to any provision of AFI 11-2DVG, Vol. 3, DVG Flying Operations Procedures must by reported to 201 AS/DO. All waivers and waiver requests will be coordinated with 201 AS/DOV.

1.5. Requisition and Distribution Procedures. Order this AFI through the servicing publications distribution office (PDO). Unit commanders provide copies for all aircrew members and associated support personnel. This publication is available digitally on the SAF/AAD WWW site at **http://afpubs.hq.af.mil**. Contact your Publishing Distribution Office (PDO) for the monthly CD-ROM or access to the bulletin board system.

1.6. Improvement Recommendations. ANG Directorate of Operations (ANG/DO) has overall responsibility for administration of this volume. Send comments and suggested improvements to this instruction on AF Form 847, Recommendation for Change of Publication.

Chapter 2

COMMAND AND CONTROL

2.1. General.

2.1.1. The Air National Guard has command of 201 AS airlift forces. Resources are assigned by priority to NGB OCONUS, CVAM OCONUS and JOSAC CONUS missions. Aircraft and crews of the 201 AS are outside the normal command authority of the AMC command and control (C2) system. Aircraft scheduling conflicts should be addressed to ANG/DOXE.

2.1.2. The 201 AS Current Operations and Mission Coordination sections act as liaisons between Aircraft Commanders and the mission tasking authority.

2.2. Execution Authority.

2.2.1. Mission. Once aircraft are assigned, execution approval originates with the authorized command agency. All requirements involving movement of 201 AS OSA aircraft are coordinated between these agencies and either the 201 AS Current Operations section, for overseas flights, or the Mission Coordination Center. OCONUS aircraft scheduling conflicts should be addressed to ANG/DOXE.

2.2.2. Training Missions/Off-Station Training Flights. Execution approval for local training missions will be the squadron commander in accordance with the mission requirements levied by the agencies specified in paragraph **2.1.** 113 WG/CC is the approval authority for OCONUS training flights. The 201 AS/CC is the approval authority for CONUS, non-stereo, off-station trainers. Prior to approval, the 201 AS/DO will carefully review each proposed trainer's itinerary to ensure it justifies and represents the best avenue for meeting training requirements.

2.3. Aircraft Commander Responsibility and Authority.

2.3.1. An Aircraft Commander is designated for all flights on the flight authorizations in accordance with AFI 11-401, Flight Management and the AMC supplement.

2.3.2. Aircraft Commanders are:

2.3.2.1. In command of all persons aboard the aircraft.

2.3.2.2. Responsible for the welfare of the crew and the safe accomplishment of the mission.

2.3.2.3. Vested with the authority necessary to manage crew resources and accomplish the mission.

2.3.2.4. The final mission authority and will make decisions not specifically assigned to higher authority.

2.3.2.5. The final authority for requesting or accepting any waivers affecting the crew or mission.

2.3.2.6. Responsible for ensuring that only activity authorized by the executing authority is accomplished, unless emergency conditions dictate otherwise.

2.3.2.7. Charged to keep the 201 AS Operations officer and applicable C2 agency informed concerning mission progress and difficulties.

2.4. Mission Clearance Decision. The Aircraft Commander has final responsibility for safe conduct of the mission. The Aircraft Commander possesses full authority for all mission operational decisions. Conduct all flights with the priorities of SAFETY *first*, passenger COMFORT *second*, and schedule RELIABILITY *third*.

2.4.1. Mission Confirmation. On or prior to the first leg of each mission, the Aircraft Commander must review the exact mission itinerary, specific landing locations, and other applicable mission requirements with the on-board contact. If discrepancies arise, the Aircraft Commander will advise the contact to pass the proposed changes to NGB, HQ USAF/CVAM or JOSAC, as applicable, for approval/disapproval. If the request may impact other 201 AS missions, the Aircraft Commander should pass the request to the Mission Coordination Center for approval.

2.4.2. Reroutes and Diverts. Aircraft Commanders may reroute or divert their missions if required due to emergency situations or adverse weather. Attempt to coordinate mission diversions in advance with the applicable commanding agency. If the commanding agency directs an aircraft to an alternate airfield, the C2 Center agency should ensure the aircraft commander is provided existing and forecast weather for the alternate and appropriate airfield information from the ASRR. If the planned alternate becomes unsuitable while en route, the aircraft commander should coordinate with the C2 Center for other suitable alternates. The C2 Center agency should coordinate with customs and ground service agencies to prepare for arrival. The aircraft commander is final authority on selecting a suitable alternate.

2.4.3. Mission Changes. Reroutes or other itinerary changes requested by the on-board contact on en route missions must be coordinated with the Mission Coordination Center for approval/disapproval by the commanding agency. Itinerary changes to a mission en route requested by the commanding agency must be approved through the Mission Coordination Center. Normally, the Aircraft Commander will not change the mission itinerary until approved.

2.4.4. Divert Coordination. In the event of an emergency diversion to an alternate, the Aircraft Commander coordinates all border clearance and aircraft servicing requirements. Command agencies should assist the Aircraft Commander when requested. The Aircraft Commander will also provide DV and party with all necessary assistance, including obtaining transportation and lodging.

2.5. Aircrew Responsibilities.

2.5.1. Command and Control. The Aircraft Commander is the focal point for interaction between aircrew and mission support personnel. Aircraft Commanders must inform the appropriate C2 of any factors that may affect mission accomplishment. The 201 AS commander delegates primary responsibility for mission management to the Aircraft Commander, through the Mission Coordination Center. Aircraft Commanders, as representatives of the 201 AS commander, are the final authority for all operational matters pertaining to their aircraft, crew, and mission.

2.5.2. Aircrew Availability. At en route stations, mission itineraries are subject to change on short notice, and crews may be diverted to support another DV or mission. Unless directed otherwise, 201 AS aircrews are not required to maintain a standby/alert status during scheduled ground times; however, all Aircraft Commanders must be aware of crewmembers planned activities and locations during the entire ground time.

2.6. Operational C2 Reporting.

2.6.1. Flight Following. TACC will provide 24-hour flight following for all OCONUS missions with AMC mission numbers. They will be informed of any unusual circumstances and provided all pertinent mission information through the unit Mission Coordination Center.

2.6.2. Command Agencies. Report all mission movement information IAW command agency directives.

2.6.2.1. JOSAC will provide 24-hour mission management for CONUS missions under their mission numbers.

2.6.2.2. The Aircraft Commander will coordinate with Global Patient Movement Requirements Center (GPMRC) for all aeromedical evacuation missions.

2.6.2.3. Unusual Circumstances. Notify the command agency and Mission Control Center immediately of any unusual occurrence.

2.6.3. Crew Location. Notify the controlling agency, Mission Coordination Center and/or on-board contact of aircrew location and telephone or pager number during each crew rest and during any other ground time when the crew will leave the immediate vicinity of the aircraft.

2.6.4. DV Messages. Airborne unclassified messages originated by DV passengers may be transmitted at the discretion of the Aircraft Commander.

2.7. Mission Responsibilities.

2.7.1. Threat Assessment/Force Protection. TACC via the AMC Threat Working Group (TWG) will provide threat assessment information to ANG/DO and aircrews in accordance with current TWG data.

2.7.1.1. Current Operations will coordinate with ANG/DOXF to provide force protection if required.

2.7.1.2. The Aircraft Commander will contact TACC three (3) hours prior to departure for all "Secure Launch" locations.

2.7.1.3. ANG/DO is the waiver authority for all threat assessment/force protection issues.

2.7.2. Mission Planning. The 201 AS Current Operations section acts as the single point of contact within the 201 AS for mission assignments from NGB and HQ USAF/CVAM for overseas missions. The Mission Coordination Center acts as the single point of contact for JOSAC missions. These sections act as executive agents for the 201 AS commander to ensure missions are planned and executed as scheduled. During the mission-planning phase, these sections act as liaisons between the Aircraft Commander and the mission tasking authority and will inform ANG/DOXE at the following e-mail address: **OCONUS_scheduling@ang.af.mil**.

2.7.2.1. For all multi-ship operations, (e.g., funeral runs, summits, troop movements), 201 AS/DO will ensure that an appropriate level of ground/flight supervision is provided for the entire mission.

2.7.2.2. Emphasis should be placed on who is the overall mission commander for the operation.

2.7.3. Mission Management. The 201 AS Commander delegates primary responsibility for mission management to the Aircraft Commander.

2.8. C2 Agency Telephone Numbers. 201 AS publishes a listing of telephone numbers to assist crews in coordinating mission requirements through appropriate C2 agencies. It is published as a separate document, and located in all mission trip kits.

Chapter 3

CREW MANAGEMENT

3.1. Aircrew Qualification/Upgrade Requirements.

3.1.1. Requirements.

3.1.1.1. Primary crewmembers or those occupying a primary position during flight must be qualified (current and valid AF Form 8, Certificate of Aircrew Qualification) or in training for qualification for that crew position.

3.1.1.2. If noncurrent, or in training for a particular event, the crewmember must be under the supervision of an Instructor or Examiner while accomplishing takeoffs, approaches and landings.

EXCEPTION: General Officers may be authorized to perform pilot duties on 201 AS aircraft. General Officers must comply with AFI 11-202,Vol. 1, Aircrew Training, AFI 11-401 and AFI 11-4-1, ANG Sup 1.

3.1.2. Missions with Passengers. Touch-and-go landings with passengers are prohibited. With passengers on board, take-off, climb-out, flight under actual instrument conditions, approach, and landing may be made by any qualified (current and valid AF Form 8 for MDS specific aircraft) pilot. Only a pilot that is qualified will occupy a pilots seat with passengers onboard the aircraft. One of the following conditions must be met:

3.1.2.1. Two qualified and current pilots (1 Aircraft Commander or higher, 1 copilot or higher) must be at the controls.

3.1.2.2. A qualified pilot non-current no more than 60 days for mission requirements and an IP providing direct supervision must be at the controls (Aircraft Commanders regaining mission currency will be designated in pilot command).

3.1.2.3. A qualified Aircraft Commander upgrade candidate on an initial or re-qualification Operational Mission Evaluation (OME) and a qualified copilot under supervision of a qualified Flight Examiner must be at the controls (Aircraft Commander upgrade candidates will be designated in pilot command).

3.1.2.4. A basic qualified (valid AF Form 8 in MDS specific aircraft) General Officer and an IP providing direct supervision must be at the controls.

3.1.3. Qualification Training . Initial qualification, re-qualification, or upgrade training for pilots will not be conducted on missions with passengers onboard. Mission qualification training, operational mission evaluations, and line training/development missions may be conducted on missions with passengers onboard only if the individual in training is qualified at the applicable level.

3.1.4. Local Training and Evaluation Missions. Non-current or unqualified pilots may perform crew duties under the supervision of a qualified Instructor or Examiner. If passengers are carried, paragraph **3.1.2.** applies.

3.1.5. Maintenance Specialists. Maintenance specialists flying for the purpose of conducting in-flight maintenance inspections are exempt from the restrictions in paragraphs **3.1.2.** through **3.1.4.** These specialists should be deplaned as soon as practical upon completion of the in-flight inspection.

3.1.6. Other Crewmembers. Other non-current or unqualified crewmembers assigned in the aircraft may be added to the minimum complement of qualified and current primary crewmembers. They may perform duties in their designated crew position when under the supervision of a current Instructor or Examiner qualified in the respective crew position (direct supervision for critical phases of flight). Noncurrent or unqualified crewmembers may fill a primary crew position under the supervision of a Flight Examiner (direct supervision for critical phases of flight) during flight evaluations in accordance with AFI 11-202 Vol. 2, *Aircrew Standardization/Evaluation Program***.** At the Aircraft Commander's discretion, the Instructor or Examiner may be required to assume the primary crew position during critical phases of flight or adverse conditions.

3.1.7. Multiple Qualification.

3.1.7.1. Crewmembers must be approved and re-certified for multiple qualification each year through ANG/DO.

3.1.7.2. Requirements. Pilots must have at least 100 hours in command in one aircraft before consideration of multiple qualification. They must also have a minimum of 1250 total flight hours and receive recommendation from a qualified Instructor or Examiner. multiple-qualified pilots should not exceed a qualification higher than Aircraft Commander in their secondary aircraft. Waiver authority is 201 AS/CC.

3.1.8. Upgrade Requirements. (Waiver authority is 201 AS/CC). To be eligible for upgrade, pilots must be recommended and have the minimum of either total military hours or total aircraft hours depicted in **Table 3.1.**

Table 3.1. Pilot Upgrade

Upgrade Position:	Total Military Hours	Total Aircraft Hours
To: First Pilot	>500	OR 100 and 4 months in aircraft
To: Aircraft Commander	1000<1899	>200
To: Aircraft Commander	>1900, Previously Qualified AC	>50
To: Instructor		>200, after certification to AC
To: Flight Examiner		As recommended after cert. To IP

3.1.9. Flight Engineer Instructor upgrade. Must have a 7-level Flight Engineer primary AFSC and have the minimum flying time shown in **Table 3.2.**

Table 3.2. Flight Engineer Upgrade

Upgrade Position:	Total Military Hours	Total Aircraft Hours
To: Flight Engineer Instructor	<2000	>400
To: Flight Examiner	Š2000	>200

3.1.10. FA Upgrade . Individuals must have the minimum flying time shown in **Table 3.3.**

Table 3.3. FA Upgrade

Upgrade Position:	Total Military Hours	Total Aircraft Hours
To: Second	N/A	50
To: First	N/A	100
To: Instructor	<2000	>400
To: Flight Examiner	Š2000	>200

3.2. Crew Complement

3.2.1. Due to lack of on board crew rest facilities, C-22B and C-38A aircrews will not be augmented.

3.2.2. Minimum crew complement for basic and overseas duty periods are shown in **Table 3.4.**

Table 3.4. Minimum Crew Complement

Crew Position	C-22B	C-38A
Aircraft Commander	**1** [2]*	**1** [2]*
Copilot or higher	**1**	**1**
FE	**1** [2]*	
1st FA	**1** [2]	**1** (note 2)
Additional FAs	**2** (note 1)	
Crew Chief	**1** (note 2)	

3.2.3. *Operations Officer policy on manning overseas missions. The ability to quickly replace crewmembers in the event of an emergency or illness is significantly hindered on overseas missions. Increase the crew complement, as indicated by the bracketed numbers in the above chart, as allowable by crew availability.

NOTES:

1. Students may be added to the mission, but will be added in addition to the minimum complement.
2. Optional crewmember on overseas missions at discretion of Aircraft Commander.

3.3. Scheduling Restrictions.

3.3.1. Crewmembers will not be scheduled to fly nor will they perform crew duties:

3.3.1.1. When the maximum flying time limitations of AFI 11-202V3, General Flight Rules, will be exceeded.

3.3.1.2. After consuming alcoholic beverages within 12 hours of take-off or when under the influence of alcohol. (Crewmembers will not consume alcoholic beverages until all crew duties are completed.)

3.3.1.3. After consuming alcoholic beverages within the 12-hour period prior to assuming alert/standby force duty.

3.3.1.4. Within 72 hours of donating blood. The flying unit commander must approve the donation of blood by crew members in a mobility assignment or who are subject to flying duties within this 72- hour period. Crewmembers should not normally donate blood.

3.3.1.5. When taking oral or injected medication unless individual medical waiver has been granted by the Command Surgeon. Crewmembers may not self- medicate except IAW AFI 48-123, Medical Examinations and Standards. The following is a partial list of medications which may be used without medical consultation:

3.3.1.5.1. Skin antiseptics, topical anti-fungal, 1 percent Hydrocortisone cream, or benzyl peroxide for minor wounds and skin diseases which do not interfere with the performance of flying duties or wear of personal equipment.

3.3.1.5.2. Single doses of over-the-counter aspirin, acetaminophen or ibuprofen to provide analgesia for minor self-limiting conditions.

3.3.1.5.3. Antacids for mild isolated episodes of indigestion.

3.3.1.5.4. Hemorrhoid suppositories.

3.3.1.5.5. Bismuth subsalicylate for mild cases of diarrhea.

3.3.1.5.6. Aircrew as may use oxymetazoline or phenylephrine nasal sprays as “get me downs” should unexpected ear or sinus block occur during flight. These should not be used to treat symptoms of head congestion existing prior to flight.

3.3.1.6. Within 24 hours of compressed gas diving (including scuba); surface supplied diving, or hyperbaric (compression) chamber exposure and aircraft pressurization checks that exceed 10 minutes duration.

3.3.1.7. Within 12 hours after completion of a hypobaric (altitude) chamber flight above 25,000 feet. Personnel may fly as passengers in aircraft during this period, provided the planned mission will maintain a cabin altitude of 10,000 feet MSL or less. For altitude chamber flights to a maximum altitude of 25,000 feet or below, aircrew members may fly without delay as crewmembers or passengers if their cabin altitude does not exceed 15,000 feet.

3.3.2. Do not take-off early (prior to scheduled departure time) if the early take-off time would violate these restrictions.

3.4. Alerting Procedures.

3.4.1. Self-alerting procedures are normally used for all missions. The Aircraft Commander sets the crew reporting time and location.

3.4.2. Home-station departure show time will normally be 2+00 prior to scheduled take-off time. Normally, off-station crew reporting time is no later than 2 hours prior to scheduled departure time.

3.4.3. The Aircraft Commander may establish other reporting times as required for mission accomplishment, e.g. scheduled mission departure time changes, increased travel time from hotel to plane, customs, etc.

3.5. Flight Duty Period (FDP).

3.5.1. FDP is the amount of time an aircrew may perform combined flight and ground duties. FDP is the time period between mission reporting and final aircraft engine shutdown. For planning purposes, FDP normally includes 45 minutes post mission duty time, not to exceed the maximum FDP. When post flight duties exceed 45 minutes, FDP includes the additional time required to complete the post-flight related duties.

NOTE: FDP includes both military duty and civilian work. It begins when the individual reports for his or her first duty period (military or civilian) and ends at completion of post mission duties at the end of the mission or series of missions.

3.5.1.1. Maximum FDP is 16 hours. The FDP for all crewmembers is 12 hours without an operative autopilot pitch axis.

3.5.1.2. If the autopilot fails after departure, notify the commanding agency and the 201 AS Mission Control Center, continue to the next stop, and comply with the preceding limitations.

3.5.1.3. FDP beginS at the scheduled crew reporting time except for the following.

3.5.1.3.1. Early Reporting. For crewmembers performing official duties prior to flight related duties, FDP begins when the crewmember reports for duty.

3.5.1.3.2. Alert/Standby Crews. For alert crews launched on an as-soon-as-possible basis, FDP begins when the crew is notified of the mission. For alert crews launched on other than an as-soon-as-possible basis, FDP begins when the crew reports for duty.

3.5.1.4. The mission directive or controlling C2 CENTER will establish the length of FDP when the crew shows for duty, not to exceed maximum FDP.

3.5.1.5. Normally, FDP ends 45 minutes after engine shutdown at the end of the mission. If any crewmember must perform mission-related duties past 45 minutes, FDP does not end until that crewmember completes these duties. These duties include up or down loading, servicing, debriefing, mission planning, etc. After mission completion, crewmembers will not be used for mission related duties supporting other missions; i.e., crew chiefs will not be used to service other aircraft. Post mission duties will not be performed after the maximum FDP has expired.

3.5.1.6. FDP limitations do not apply to ASNCOs, Crew Chiefs, and other crewmembers assigned specifically to perform ground duties.

3.5.1.7. Deadhead Time. Duty time for crewmembers positioning or de-positioning for a mission or mission support function. Crewmembers may perform primary crew duties after deadheading if they will not exceed FDP for the mission to be flown beginning at reporting time for the deadhead flight. Crewmembers may deadhead following primary crew duties. FDP limits apply for that period that the crewmember is performing duties. The FDP and deadhead time will not exceed 24 hours. That crewmember WILL NOT perform any crew duties during or after deadhead time.

3.5.2. Training FDP. Maximum FDP for training missions is 12 hours

3.5.3. Waiver Authority. 113th WG/CC has delegated a 2-hour waiver authority to the 201 AS commander (OG/CC equivalent). During the mission execution phase, after considering the safety and capability of their crew, Aircraft Commanders may request the 201 AS commander extend the maximum FDP specified in this AFI, normally up to 2 hours. 113WG/CC must approve extensions required in the planning phase, or beyond 2 hours in the execution phase.

3.6. Crew Rest.

3.6.1. Home Station Predeparture Crew Rest.

3.6.1.1. Missions Less Than 16 Hours. Crewmembers will enter crew rest a minimum of 12 hours prior to reporting time. (201 AS/CC is delegated waiver authority for 201 AS missions.)

3.6.1.2. Missions Greater Than 16 Hours. All primary and deadhead crew members should enter crew rest 24 hours before planned departure time for missions scheduled away from home station for more than 16 hours. Crewmembers may perform limited non-flying duties, including mission planning, etc. during the first 12 hours of this period. Deadhead crewmembers will not be manifested as passengers to reduce or eliminate crew rest requirements.

3.6.2. En route Crew Rest and Ground Time. A minimum 15:15 hours ground time between engine shutdown and mission takeoff should normally be planned unless extended postflight duties are anticipated.

3.6.2.1. Minimum crew rest period is 12 hours beginning with completion of post-flight duties and ending at reporting time. This period provides the crew a minimum of 8 hours of uninterrupted rest plus time for transportation, and meals.

3.6.2.2. Crew rest normally begins 45 minutes after final engine shutdown. The 45-minute time period provides crews with time to complete normal post-flight duties. These duties include, but are not limited to, refueling, repositioning, performing maintenance, or completing mission debriefings.

3.6.2.3. If any crewmember must stay at the aircraft past the 45-minute period, crew rest does not begin until he or she has completed these post-flight duties.

3.6.2.4. The Aircraft Commander may modify normal ground time:

3.6.2.4.1. In the interest of safety.

3.6.2.4.2. When the mission is behind schedule or when requested by the DV, approved by commanding agency and in accordance with AFI 11-202, Vol. 3, General Flight Rules.

3.6.2.4.3. To no less than 12 hours from completion of post flight duties until mission reporting time. Mission reporting time may be adjusted as needed. Before reducing normal ground time consider mission preparation time and other factors peculiar to the mission.

3.6.2.4.4. All modifications should be coordinated with controlling agency and 201AS Mission Coordination Center.

3.6.3. Crew Rest Interruptions. Any official business required of an aircrew member interrupts the crew rest period. This includes official business conducted on the telephone. If crew rest is interrupted so that an individual cannot get 8 hours of uninterrupted rest, the individual must be afforded 8 more hours of uninterrupted rest, plus reasonable time to dress, eat, travel, etc. Any interruption must be made only under the most exceptional circumstances. The individual must consider interruptions that are unofficial so that the intent of crew rest is met.

3.6.4. Post-Mission Crew Rest (PMCR). Applies only to full-time AGR crewmembers and technicians and traditional guard members on annual or special training status.

3.6.4.1. Crewmembers, returning to their home base, will be given sufficient time to recover from the cumulative effects of their mission and tend to personal needs. PMCR begins immediately on mission termination.

3.6.4.2. Provide one hour of PMCR time (up to a maximum of 72 hours) for each 3 hours of TDY when the duty exceeds 16 hours away from home-station. This time will not run concurrently with pre-departure crew rest.

3.6.4.3. The 201 AS/CC is designated PMCR waiver authority and will not delegate this authority. Limit PMCR waivers to extraordinary circumstances only. This must not be used for day to day operations.

3.6.5. Chief/Aircraft Security NCO (ASNCO) Work and Rest Plan. For off-station missions, Crew Chiefs and ASNCOs are Crew responsible to the Aircraft Commander and only the Aircraft Commander. The Aircraft Commander and Enlisted Aircrew Coordinator will determine how long Crew Chiefs and ASNCOs can safely perform duties. Crew Chiefs and ASNCOs must have the opportunity to sleep 8 hours in each 24-hour period. See AFI 21-101, Maintenance Management Policy, for further guidance.

3.6.6. Exercises and Contingencies. Crew rest waivers approved for exercises and contingencies will be published in the OPORD or OPLAN.

3.7. Standby/Alert Force Duty.

3.7.1. Standby/Alert Duty. Schedule standby/alert crews as required by higher headquarters.

3.7.1.1. Standby/alert crews should perform standby/alert duty at home. At their discretion, standby/alert crewmembers are permitted to perform up to 4 hours of on-base duties each 24-hour standby/alert period; they are not limited to staying at home for their entire duty period.

3.7.1.2. The primary method of contact will always be the telephone. If a crewmember is not at home during standby/alert duty they should provide the squadron with a contact phone number. Pagers and cell phones will only be used as a backup method of contact.

3.7.1.3. Crewmembers will not be required to perform any duties other than standby/alert duty during the standby/alert period. Performing standby/alert duty does not alleviate crewmembers from completing prior assigned tasks.

3.7.2. Crew Rest. Crewmembers are given 12 hours of pre-standby/alert crew rest. Crews are legal for mission reporting after pre-standby/alert crew rest. Preflight duties, if required, interrupt crew rest. In no case will a crewmember be placed on standby/alert duty within 12 hours of the previous flight duty period.

3.7.3. Standby/Alert Force Crew Management.

3.7.3.1. Schedule standby/alert crews to have the most flexible crew complement for the maximum applicable FDP.

3.7.3.2. Higher headquarters will determine the aircraft alert requirement, while the respective squadron will have a crew available for that MDS and a backup aircraft if required.

3.7.3.3. Standby/alert crewmembers will not fly local missions while on alert. Other aircrews may be used for contingency missions if crew rest and FDP limitations per this AFI are taken into consideration. Designated standby/alert crews only when a specific requirement is established.

3.7.3.4. The normal tour of standby/alert crew duty is 24 hours from 0500 to 0500. Crewmembers will not be scheduled for more than 3 consecutive periods of 24 hours of standby/alert duty.

3.7.3.5. MAJCOM/DO may waive all or any part of a crew-rest period.

3.7.4. Post Standby/Alert Missions. On completion of standby/alert duty, aircrew members may be dispatched on a mission.

3.7.4.1. Standby/alert duty and pre-departure crew rest may be concurrent if notification is provided at least 12 hours prior to mission reporting.

3.7.4.2. If started, post standby/alert crew rest must be completed before the start of pre-departure crew rest.

3.7.4.3. If an aircrew member is dispatched on a mission, compute the post mission crew rest time on standby/alert time plus mission time.

3.7.5. Post Standby/Alert Crew Rest. Aircrew members not dispatched on a mission following standby/alert duty will receive post mission standby/alert crew rest as follows:

3.7.5.1. If standby/alert duty is performed away from normal quarters, crew rest time is computed from this standby/alert time on the same basis as for mission time.

3.7.5.2. If standby/alert duty was performed in normal quarters, no crew rest time is authorized.

3.8. Orientation Flights and Incentive Flights. Refer to DOD 4515.13R, AFI 11-401, and the ANG supplement. If a military member is authorized to accompany unit aircraft as a part of the incentive program, comply with appropriate procedures for processing.

3.9. Supplemental Training Mission (STM).

3.9.1. Opportune airlift of cargo and mission personnel may be accomplished as a by-product of crew training missions. STMs may be authorized when minor adjustments can be made to a scheduled training mission or when a productive aircrew-training mission can be generated for the airlift. The training mission will not be degraded in any manner to accomplish the STM. Use of STMs for logistical support will be authorized only when normal military or commercial transportation modes are unable to provide required support.

3.9.2. STMs may be approved by the 201 AS Commander. On STMs Aircraft Commanders will release maximum number of space available seats commensurate with mission requirements and safety.

3.9.3. Simulated emergency procedures and touch-and-go landings will not be performed with passengers on board.

3.10. Off-Station Training Flights.

3.10.1. 113 WG/CC is the approval authority for OCONUS training flights.

3.10.2. The 201 AS/CC is the approval authority for CONUS off-station trainers.

3.10.3. Prior to approval, the 201 AS/DO will carefully review each proposed trainer's itinerary to ensure it justifies and represents the best avenue for meeting training requirements.

3.11. InterFly.

3.11.1. ANG/DO may authorize the interfly of assigned aircrews and/or aircraft.

3.11.2. Long-term interfly arrangements will be documented in a memorandum of agreement (MOA) or similar-type document. Interfly is authorized under the following conditions:

3.11.2.1. Aircraft ownership will not transferred.

3.11.2.2. Crewmembers provided by other agencies will not act as pilot in command without approval by 201AS/DO.

3.11.2.3. As a minimum, crews will be qualified/certified in the MDS and model as well as systems/configuration required, to fly the aircraft and/or mission.

3.11.2.4. Crewmember (s) using interfly will follow "basic" operational procedures

3.11.2.5. Each commander involving resources (personnel or aircraft) (or MAJCOM, if appropriate) must concur with interfly and address request by memo to ANG/DO.

3.11.2.6. Request must include details of the deployment or mission including aircrew name(s), duration, or special circumstances.

3.11.2.7. Flight Mishap accountability is MAJCOM designated by PEID code for mishap aircraft.

3.11.2.8. Ground Mishap accountability is in accordance with AFI 91-204, Safety Investigations and Reports.

Chapter 4

AIRCRAFT OPERATING RESTRICTIONS

4.1. Objective.

4.1.1. The ultimate objective of the aircraft maintenance team is to provide an aircraft for launch with all equipment operational (Fully Mission Capable, FMC). Manpower limitations, skills, and spare part availability have a negative and direct impact on accomplishment.

4.1.2. However, some redundant systems allow safe operation with less than all equipment operational for certain missions under specific circumstances. The Aircraft Commander, using the following policies, determines an aircraft's overall status. The Minimum Equipment List (MEL) will be applicable to all home station dispatches. Use the following maintenance identifiers to effectively communicate an aircraft's status:

4.1.2.1. Mission Essential (ME). An item, system, or subsystem component essential for safe aircraft operation or mission completion will be designated Mission-Essential (ME). An Aircraft Commander accepting an aircraft (one mission or mission segment) without an item or system does not commit that Aircraft Commander (or a different Aircraft Commander) to subsequent operations with the same item or system inoperative.

4.1.2.2. Mission Capable (MC). Any discrepancies that are not currently ME, but may become ME (if circumstances change), are designated as MC. Every effort will be made to clear the MC discrepancies at the earliest opportunity to the extent that maintenance skills, ground time, and spare part availability permit. If subsequently, in the Aircraft Commander's judgment, mission safety would be compromised by the lack of any component, the Aircraft Commander may re-designate the said component as ME. However, do not delay a mission to correct an MC discrepancy.

4.1.2.3. Open Item. Discrepancies not expected to adversely impact the current mission or any subsequent mission is not designated MC or ME. These items receive low priority and are normally worked at home station. Do not accept an aircraft from factories, modification centers, or depots unless all instruments are installed and operative.

4.1.2.4. Instruments. Engine performance, aircraft attitude, vertical velocity indications, altitude, speed, and heading instruments should be operative in both pilot positions. For instruments with both analog and digital displays, either the analog or digital presentation is acceptable.

4.2. MEL Policy.

4.2.1. It would be impractical to prepare a list that would anticipate all possible combinations of equipment malfunction and contingent circumstances. The MEL lists the equipment and systems considered essential for routine as well as contingency operations. The list does not necessarily include all equipment or systems essential to airworthiness (e.g. rudder, ailerons, elevators, flaps, tires, etc.). Those items stating a minimum requirement and having no listed exceptions are grounding items.

4.2.2. Aircraft Commanders must refer to their aircraft MEL for inoperative systems before dispatch. 201 AS/CC will be the waiver authority for any MEL item.

4.2.3. The Aircraft Commander is responsible for exercising the necessary judgment to ensure aircraft are not dispatched with multiple items inoperative that may result in an unsafe degradation and/

or an undue increase in crew workload. The possibility of additional failures during continued operation with inoperative systems or components should be considered. This chapter is not intended to allow for continued operation of the aircraft for an indefinite period with systems/subsystems inoperative.

4.2.4. If, after exploring all options, an Aircraft Commander determines a safe launch is possible with an item inoperable (beyond a particular restriction) the Aircraft Commander shall request a waiver. Use C2 channels to notify the appropriate execution agency of intentions. Plan a minimum 1-hour response to the waiver request.

4.2.5. Off-Station Maintenance Difficulties. Aircraft Commanders with maintenance difficulties away from home station will coordinate all requirements for supply and maintenance assistance with local support agencies. Keep 201 AS Mission Coordination Center informed of current aircraft status. If an aircraft arrives at any station with a maintenance status that would prevent or delay departure, the Aircraft Commander will take whatever action is necessary to have Mission Ready (MR) status restored as soon as possible after landing, regardless of scheduled ground time. Aircraft must be MR as soon as possible to support distinguished visitor (DV) schedule changes or diversion to a higher priority mission. The Aircraft Commander will monitor maintenance and report when the aircraft is restored to MR status.

4.2.5.1. If parts are required, advise the Mission Coordination Center that supply assistance is required. The Aircraft Commander may be provided a local contact that can arrange for parts locally. If parts will be shipped, MCC will provide the aircrew with shipping details. Normally, parts are shipped to the Aircraft Commander in care of the U.S. Embassy or other mission supply activity. The Aircraft Commander or embassy will make arrangements to have someone pick up the shipment as soon as possible after it arrives. When the parts shipment has been received, notify the Mission Coordination Center to preclude unnecessary tracing actions.

4.2.5.2. If maintenance assistance is required beyond the scope of local capabilities, advise the 201 AS Mission Coordination Center of anticipated requirements. If necessary, maintenance specialists will be sent by the most expeditious transportation means TDY from Andrews AFB.

4.2.5.3. Most C-22B and C-38A parts are furnished by the Contractor Operated Maintenance Base Supply (COMBS) facilities. COMBS repairable parts must be returned to the COMBS facilities. The Aircraft Commander will ensure the defective parts are returned to Andrews AFB, upon the aircraft from which they were removed, or by the most advantageous means available, unless otherwise directed. The Aircraft Commander will relay the method of shipment and name/phone number of the local contact, if applicable, to the Mission Coordination Center. Ensure the flight engineer, or flight mechanic, attaches a AFTO Form 350, Repairable Item Processing Tag, to each defective part upon removal. Coordination for supply support will be arranged through the contractors support facilities at other stations.

4.2.6. Maintenance Delay. If a maintenance condition exists that will prevent or delay a mission departure, the Aircraft Commander will advise the Mission Coordination Center immediately. Depending on DV desires and the urgency of their schedule, the Aircraft Commander and the on-board contact coordinate, through the controlling agency, a new departure time or arrange substitute transportation if available and acceptable to the DV.

4.3. Waiver Protocol.

4.3.1. Waiver to operate with degraded equipment exceeding this chapter will be coordinated through the 201 AS/CC.

4.3.2. Local Missions. Waiver authority for units flying local missions is the 201 AS/DO.

4.4. Technical Assistance Service.

4.4.1. The Aircraft Commander may request (at anytime in the decision process) technical support and additional assistance from their home unit, controlling agency staff, and maintenance representatives.

4.4.2. Aircraft Commanders electing to operate with degraded equipment or aircraft systems (with appropriate waiver) must coordinate mission requirements (i.e. revised departure times, fuel requirements, maintenance requirements, etc.) with Mission Coordination Center prior to flight.

4.4.3. When it is necessary to protect the crew or aircraft from a situation not covered by this AFI and immediate action is required, the aircraft commander may deviate from the MEL and this chapter. Report deviations (without waiver) via AMC-DOV (AR) 9624, Report of Violations and Policy/Procedures Waivers, through channels to ANG/DO within 48 hours. Units must be prepared to collect background information and submit a follow-up written report upon request.

4.5. One-Time Flights.

4.5.1. If an aircraft has a safety-of-flight condition beyond the immediate or final repair capability of an en route facility, temporary repairs may be made to allow a one-time flight to a pre-selected facility capable of final repair.

4.5.2. Aircraft Commander's Recommendation. Aircraft Commanders will send their recommendations to 201 AS/DO.

4.5.3. Approval Authority. The 201 AS/DO, with concurrence of 201 AS/DOV, has approval authority. Approval will include flight restrictions and flights only to the designated repair facility.

Chapter 5

OPERATIONAL PROCEDURES

5.1. Checklists.

5.1.1. The pilot flying the aircraft will initiate the desired checklists. The AC is responsible for ensuring all checklists are accomplished. Items may be accomplished prior to the checklist being read. Initiate the checklist to ensure all items have been accomplished.

5.1.2. Accomplish all checklists with strict discipline. A checklist is not complete until all items have been completed. Once initiated, momentary hesitations for coordination items, ATC interruptions and deviations are authorized.

5.1.3. Correct checklist terminology will be employed at all times. Checklist items followed by "as required" are items requiring a different procedure for varying conditions. "As required" will not be used as a response; instead, the actual position or setting will be stated.

5.1.4. To facilitate checklist accomplishment all required crewmembers will be on headset to monitor radio transmissions.

5.1.5. The "After Landing" checklist will be called for when clear of the runway and at a safe speed.

5.1.6. Notes amplifying checklist procedures or limitations may be added to the checklists (in pencil). C-38A will make use of Quick Reaction Checklist to support selected Emergency Action Procedures.

5.1.7. Checklist Inserts. Units may supplement T.O. guidance (for example Secure Communications) with HQ ANG/DO approved checklist inserts. These inserts may be placed at the end of the appropriate checklist or in an in-flight guide. All checklist inserts must have a POC. If any crewmember has recommendations or changes they should contact the POC. The POC will consolidate inputs and submit changes to HQ ANG/DOV. Local in-flight guides and inserts not affecting T.O. guidance and procedures may be locally approved by 201 AS/DOV.

5.2. Duty Station.

5.2.1. A qualified pilot will be in control of the aircraft at all times during flight. (EXCEPTION: Unqualified pilots undergoing qualification training and senior staff members who have completed the Senior Staff Familiarization Course).

5.2.2. An Aircraft Commander, qualified pilot, and flight engineer will be at their duty stations during all takeoffs, departures, approaches, and landings. Notify the Aircraft Commander prior to departing assigned primary duty station.

5.3. Flight Station Entry.

5.3.1. Aircraft Commanders may authorize passengers, and observers access to the flight station during all phases of flight. In all cases, sufficient oxygen sources must be available to meet the requirements of AFI 11-202, Vol. 3, General Flight Rules.

5.3.2. Passengers and observers will not be permitted access to the pilot, copilot, or flight engineer position regardless of its availability.

5.3.3. Jump seat occupants shall be briefed on use of the oxygen mask and evacuation procedures.

5.4. Takeoff and Landing Policy. After thoroughly evaluating all conditions, the Aircraft Commander will determine who accomplishes the takeoff and landing and occupy either the left or the right seat during all takeoffs and landings.

5.4.1. Aircraft Commander Takeoff and Landing Policy. A qualified and current pilot certified as Aircraft Commander, Instructor, or Examiner will accomplish all takeoffs, approaches, and landings:

5.4.1.1. When actual emergency conditions exist unless specific conditions dictate otherwise.

5.4.1.2. When making an actual Category II ILS approach. (C-38A)

5.4.1.3. When marginal weather or hostile conditions exist.

5.4.1.4. When operating to or from airfields requiring HQ AMC, or airfield related waivers.

5.4.1.5. When the Aircraft Commander has less than the minimum number of missions in command as specified in **5.4.2.**

5.4.2. Missions in Command. Only missions where the individual is certified as an Aircraft Commander and designated in command on the flight orders will be credited as missions in command. Aircraft Commanders will make all takeoffs and landings (unless the copilot is qualified as an Aircraft Commander or higher) until they reach the minimum missions in command as depicted in **Table 5.1.**

Table 5.1. Minimum Mission In Command

MDS Aircraft Type	Minimum Missions in Command
C-22B	2 missions
C-38A	2 missions

5.4.3. First Pilots Takeoff and Landing Policy. First Pilots can accomplish takeoffs and landings on any mission at the discretion of the Aircraft Commander using the guidance in paragraph **5.4.1.** and **5.4.2.**

5.4.4. Right-Seat Procedures.

5.4.4.1. Normally, the pilot in the left seat will command gear and flap operations and the pilot in the right seat will activate the system. The right seat pilot will acknowledge the command prior to system activation. If the pilot flying the aircraft is in the right seat, that pilot should command (the pilot not flying will acknowledge) and activate gear operation, to include a go-around. The right seat pilot will command flap operation. The pilot not flying will acknowledge the command and activate the system.

5.4.4.2. Instructors and Examiners, flying in the right seat on locals, may command and operate the flaps.

5.4.4.3. Right-seat take-offs and landings, unless co-pilot only qualified, are restricted to local training or evaluation flights unless the situation dictates otherwise.

5.5. Outside Observer. When available, use a crewmember to assist in outside clearing during all taxi operations and any time the aircraft is below 10,000 feet AGL.

5.6. Seat Belts.

5.6.1. All occupants will have a designated seat with a seat belt. Use of seat belts will be as directed by the Aircraft Commander and the flight manual. When children under the age of two are accepted as passengers, their sponsor must provide their own approved Infant Car Seat (ICS). Passengers may hand-carry infant car seats. These seats will be secured to a seat using the seat belt. Adults will not hold infant seats during any phase of flight.

5.6.2. Crewmembers occupying primary crew positions will have seat belts fastened at all times in-flight, unless crew duties dictate otherwise.

5.6.3. All crewmembers will be seated with seat belts and shoulder harnesses fastened during taxi, takeoff, and landing, unless crew duties dictate otherwise. Crewmembers performing Instructor or Flight Examiner duties are exempt from seat belt requirements unless they occupy a crew station; however, a seat with an operable seat belt will be available.

5.7. Aircraft Lighting. Aircraft lighting will be in accordance with AFI 11-202, Vol. 3, *General Flight Rules,* this AFI, and applicable TOs.

5.8. Portable Electronic Devices. See AFI 11-202, Vol. 3, *General Flight Rules*.

5.9. Smoking Restrictions. In accordance with AFI 40-102, *Smoking in Air Force Facilities*, paragraph 2.2.7. The Air Force prohibits tobacco use on Air Force or contract aircraft.

5.10. AMC Passenger Manifesting Procedures.

5.10.1. At locations with an AMC passenger processing activity, air terminal or base operations personnel, IAW AMCI 24-101, Vol 14, Passenger Service, manifest passengers.

5.10.2. At locations with no AMC passenger processing activity, aircrew will manifest all passengers and leave a copy of the manifest with the flight plan. If not filed with the flight plan, annotate the location of the manifest on the flight plan IAW AFI 11-206, General Flight Rules.

5.10.3. Aircrew must never depart without an accurate and complete passenger manifest on file with a responsible agency.

5.11. Call Signs.

5.11.1. Training Missions. Aircraft will use the static call sign “BOXER” followed by a 2-digit suffix assigned to the Instructor or Evaluator. Use the assigned static call sign on all local flights including depot inputs and pickups.

5.11.2. NGB Directed Missions. Aircraft will use the static call sign “BOXER” followed by a 2-digit suffix assigned to the Aircraft Commander or as assigned.

5.11.3. HQ USAF/CVAM directed Special Air Missions. Aircraft will use call signs assigned by OPORD, mission itinerary, or diplomatic clearance. Normally, when flying CVAM missions, aircraft will use the “BOXER” call sign followed by either “22” or “23” for the C-22B or "38" or "39" for the C-38A.

5.11.4. JOSAC Missions. Use “BOXR” (No "E") and the last three digits of the mission number.

5.12. Flight Plan Designation.

5.12.1. For the C-22B, under aircraft type and equipment use “B-727/I”

5.12.2. For the C-38A, under aircraft type and equipment, use “T/ASTR/G”

5.13. Advisory Calls.

5.13.1. Pilots will periodically announce their intentions when flying departures, arrivals, approaches, and when circumstances require deviating from normal procedures.

5.13.2. Mandatory altitude calls for the pilot not flying the aircraft:

5.13.2.1. Non-precision Approaches:

5.13.2.1.1. 100 feet above minimum descent altitude (MDA).

5.13.2.1.2. “Minimums” at MDA.

5.13.2.1.3. “Runway in sight” (Call when the runway environment is in sight. Do not call too soon when obstructions to vision, such as fog, haze, low stratus clouds, etc., are present).

5.13.2.1.4. “Go-around” (Call at missed approach point if the runway environment is not in sight or if the aircraft is not in a position for a normal landing).

5.13.2.2. Precision Approaches:

5.13.2.2.1. 100 feet above decision height (DH).

5.13.2.2.2. “Land” (Call at DH if the runway environment is in sight and the aircraft is in a position for a normal landing).

5.13.2.2.3. “Go-around” (Call at DH if the runway environment is not in sight or if the aircraft is not in a position for a normal landing).

5.13.2.3. Category II ILS: (C-38A)

5.13.2.3.1. 100 feet above DH (using radio altimeter).

5.13.2.3.2. “Land” at DH (using radio altimeter) if the following are met:

5.13.2.3.3. Landing environment is in sight.

5.13.2.3.4. Airspeed is plus or minus 5 knots of the final approach speed.

5.13.2.3.5. Localizer or glide slope deviations do not exceed ½-dot deviation on the glide slope indicator (GSI) or course deviation indicator (CDI).

5.13.2.3.6. Aircraft track will remain within lateral confines of the runway extended.

5.13.2.3.7. “Go-around” at DH (using radio altimeter) if any of the tolerances above are exceeded or if the aircraft is not stabilized, with reference to glide slope, localizer, altitude, or airspeed.

5.13.2.4. Climb-Out:

5.13.2.4.1. Transition altitude.

5.13.2.4.2. 1,000 feet below assigned altitude.

5.13.2.5. Descent:

5.13.2.5.1. Transition level.

5.13.2.5.2. 1,000 feet above assigned altitude.

5.13.2.5.3. 1,000 feet above initial approach fix altitude or holding altitude.

5.13.2.5.4. 100 feet above procedure turn and final approach fix altitude.

5.14. Advisories.

5.14.1. Planned Deviations. The pilot flying the aircraft will announce any planned deviations from prescribed procedures for the approach or departure being flown.

5.14.2. Pilot Advisories. Pilots not flying the aircraft will announce any deviations from planned or prescribed procedures for the approach or departure being flown. They will also announce heading deviations, airspeed deviations of 5 knots or more below desired, and altitude deviations of 100 feet or more from desired.

5.14.3. Crewmember Advisories. Any crewmember will announce an altitude variation of 200 feet or more, an airspeed deviation of 10 knots or more below desired, or any potential terrain or obstruction clearance problem.

5.15. Communications Policy.

5.15.1. The National Guard does not give a promise of confidentiality to aircrews regarding their recorded aircraft crew communications. Crewmembers are expected to maintain a high degree of cockpit professionalism and crew coordination at all times.

5.15.2. "Sterile Cockpit." Limit conversation to that essential for crew coordination and mission accomplishment during taxi, takeoff, approach, landing, and any flight below 10,000 feet MSL (except cruise).

5.15.3. Communications during takeoff. If a condition during takeoff that would make the takeoff unsafe arises before the computed V1/GO speed is reached, the crewmember observing the condition will state "REJECT", and if possible, a brief explanation of the problem. The takeoff will be discontinued in accordance with the applicable MDS specific flight manual.

5.15.4. Aircraft Communications.

5.15.4.1. Aircrew should not discuss classified information on inter-phone.

5.15.4.2. Normally, use only one command radio plus guard. Monitoring two controlling agencies transmissions simultaneously is not recommended.

5.15.4.3. The pilot not flying the aircraft normally makes all ARTCC radio calls.

5.15.4.4. In terminal areas the pilot, copilot, and flight engineer will monitor the primary command radio unless directed otherwise.

5.15.4.5. The pilot operating the command radios will inform the crew when the primary radio is changed. Also, announce the radio (if different from the primary) on which to monitor guard.

5.15.4.6. One pilot should record and will acknowledge all air traffic control (ATC) clearances. The other pilot (except when not available during en route), or flight engineer should monitor the read-back. This includes all transmissions pertaining to ATC instructions involving departure, en

route, and approaches procedures. Disregard this procedure when ATC instructions require immediate execution or when such action interferes with timely completion of more important duties.

5.15.4.7. A flight deck crewmember will monitor guard regardless of primary radio.

5.15.4.8. When the aircraft is in other than a normal configuration (for example, an engine inoperative, hydraulic or electrical malfunction, communications difficulty, etc.), the pilot will request simultaneous transmission of the controllers instructions on a backup frequency if in a terminal area under radar control.

5.16. Crew Resource Management (CRM) Assertive Statement "Time Out".

5.16.1. "Time Out" is the common assertive statement for use by all crewmembers. The Aircraft Commander is the final decision authority.

5.16.2. The use of "Time Out" will:

5.16.2.1. Provide a clear warning sign of a deviation or loss of situational awareness.

5.16.2.2. Provide an opportunity to break the error chain before a mishap occurs.

5.16.2.3. Notify all crewmembers that someone sees the aircraft or crew departing from established guidelines, the briefed scenario, or that someone is simply uncomfortable with the developing conditions.

5.16.3. As soon as possible after a "Time Out" has been called, the aircrew will take the following actions:

5.16.3.1. 1. Safety permitting stabilize the aircraft.

5.16.3.2. 2. The initiating crewmember will voice his or her concerns to the crew.

5.16.3.3. 3. The Aircraft Commander will provide all other crewmembers with the opportunity to voice inputs relative to the stated concerns.

5.16.3.4. After considering all inputs, the Aircraft Commander will direct the aircrew to continue the current course of action or direct a new course of action.

5.17. Altitude Alerter.

5.17.1. Pilot not flying will acknowledge ATC instructions and set altitude in the alerter. Pilot flying will acknowledge altitude clearance.

5.17.2. At 1000' prior to assigned altitude, pilot not flying will call out "1000' above/below".

5.18. Transportation of Pets.

5.18.1. Transporting pets (dogs and cats) on 201 AS aircraft will be coordinated through ANG/DO.

5.18.2. Other pets or animals are normally prohibited, but may be moved according to DOD 4515.13R.

5.19. Alcoholic Beverages. The Chief of the National Guard Bureau authorizes the dispensing of alcoholic beverages on 201 AS aircraft according to AFI 34-119, *Alcoholic Beverage Program.*

5.20. Runway, Taxiway, and Airfield Requirements.

5.20.1. Runway Length for Takeoff. Do not attempt takeoff if runway available is less than required critical field length or balanced field length, as applicable.

5.20.1.1. Intersection Takeoff. Aircraft Commanders may make intersection takeoffs provided the operating environment (gross weight, weather, climb requirements, etc.) allows a safe takeoff and departure. Ensure that the aforementioned criteria are met and that TOLD is based on the actual runway remaining from the line-up point.

5.20.1.2. If takeoff end overruns are available and stressed or authorized for normal operations, they may be used to increase the runway available for takeoff. Departure end overruns (if stressed and authorized) may also be used for landing if needed.

5.20.2. Runway Length for Landing. Minimum runway length for landing and touch and go landings are shown in **Table 5.2.**

Table 5.2. Minimum Runway Lengths

MDS Aircraft Type	Minimum Runway Length For Landing	Minimum Runway Length For Touch and Go's
C-22B	5500 feet (with waiver 5000 feet)	7000 feet
C-38A	5000 feet (with waiver 4500 feet)	6000 feet

5.20.2.1. Minimum required runway for landing is based on landing distance computed from 50 feet over threshold.

5.20.2.2. Compute landing distance with no reverse thrust.

5.20.2.3. If RVR (VIS) is equal to or greater than 24 (1/2 SM), but less than 40 (3/4 SM) add 1000 feet to landing distance.

5.20.2.4. If runway available for landing is still less than required, use landing ground roll plus l,000 feet if reported weather is equal to or greater than circling minimums. Modify approach or flare, to touchdown within the first 500 feet of runway.

5.20.2.5. If operationally necessary, the 201 AS/CC may approve use of runways shorter than specified in **Table 5.2.** Minimum Runway Lengths. Approval requires careful evaluation of aircraft and crew capabilities. Request waivers through 201 AS/DO and 201 AS/DOV, respectively.

5.20.2.6. If a waiver is approved, a qualified and current Instructor, or Flight Examiner will make the landing and takeoff from the left seat. Arrivals will be planned during daylight hours.

5.20.3. Minimum Runway and Taxiway widths. Minimum runway and taxiway widths are shown in **Table 5.3.**

Table 5.3. Minimum Runway and Taxi Widths

MDS Aircraft Type	Minimum Runway Width	Minimum Taxiway Width
C-22B	75	50
C-38A	50	25

5.20.3.1. The minimum runway width required to attempt a 180-degree turn will be 90 feet for C-22B and 55 feet for C-38A (Consider deplaning a crewmember to safely marshal the aircraft).

5.20.4. Weight Bearing Capability. Aircrews and 201 AS Current Operations should contact HQ AMC/DOVS (Airfield Suitability) for all questions pertaining to airfield weight bearing capability and will review the ASRR prior to all off-station operations. Review the ASRR for airfield certification requirements. 201 AS must comply with all non-aircraft specific restrictions.

5.20.5. Takeoff or Landing Over Raised Arresting Cables. The following guidance covers BAK 9, 12, and 13 (Navy designation E-28) arresting cables. BAK 14 arresting cables are recessed in the runway surface (unless raised remotely from the tower) and are not addressed in this discussion.

5.20.5.1. Do not land on a raised arresting cable, damage may occur to the cable or aircraft.

5.20.5.2. If the aircraft lands before a raised arresting cable and rolls over it, the flight crew should contact the tower to have the cable inspected (This does not include rolling over a cable at normal taxi speeds).

5.20.5.3. Do not takeoff or land over a raised arresting cable that has been reported as slack, loose, or improperly rigged.

5.20.5.4. Airfields and units may have unique local procedures for specific runway environments. Check NOTAMs ATIS, base operations or ATC for additional information.

5.20.5.5. MDS specific aircraft flight manuals, FLIP, NOTAMS, the summary of airfield restrictions, etc. may have additional restrictions for takeoff or landing over raised arresting cables; those restrictions take precedence.

5.21. Visual Flight Rules Procedures.

5.21.1. Conduct flight operations under IFR to the maximum extent possible without unacceptable mission degradation.

5.21.2. On training flights, VFR flight rules, VFR terminal area procedures, and visual patterns will be reviewed, practiced and de-briefed to ensure aircrew VFR flight proficiency and knowledge of VFR procedures and rules are maintained.

5.21.3. When operating under VMC, ATC flight following shall be utilized to the maximum extent possible.

5.22. Wind Restrictions.

5.22.1. Wind Limitations. Airfields will be considered unusable for takeoff and landing when winds (including gusts) are greater than established in **Table 5.4.**

Table 5.4. Wind Limitations

MDS Aircraft	Maximum Wind Any Direction	Maximum Tailwind Component	Maximum Crosswind Component
C-22B	50 knots	10 knots	29 knots
C-38A	50 knots	10 knots	29 knots

5.22.1.1. The Maximum crosswind component during actual CAT II approaches (C-38) is 10 knots.

5.22.1.2. Do not attempt a take-off or landing if the maximum flight manual computed (per actual airfield conditions) takeoff and landing crosswind component is exceeded.

5.22.2. Crosswind Limits for Varying RCR Conditions.

5.22.2.1. Determine RCR versus maximum allowable crosswind component from the aircraft performance manual.

5.22.2.2. C-22B/C-38A runway condition crosswind restrictions. Use the wind speeds in **Table 5.5.** to determine maximum allowable crosswind.

Table 5.5. Crosswind Limits for Varying RCR Conditions

WET	STANDING WATER	SNOW (no melting)	SNOW (melting)	ICE (no melting)	ICE (melting)
16kts	**12kts**	**16kts**	**7kts**	**7kts**	**Not Recommended**

5.22.3. (RCR) or Runway Surface Condition (RSC) Restrictions.

5.22.3.1. During operations on runways partially covered with snow or ice, takeoff computations will be based on the reported RSC or RCR for the cleared portion of the runway.

5.22.3.2. RCR Reporting. Technical Order (TO) 33-1-23 directs that RCR information be obtained only within 20 feet of the runway centerline. Only the average RCR is reported. Numerous portions of the runway (laterally and longitudinally) may have a significantly lower RCR than the value reported.

5.22.3.3. Wet vs. RCR. For operations on wet, ungrooved runways, use the RCR designated as "wet" in the aircraft flight manual for all takeoff and landing data. Use RCR 12 if the "wet" RCR is not designated in the flight manual. For operations on grooved runways, use the reported RCR.

5.22.3.4. No Reported RCR or RSC. When RCR or RSC reporting is not available, flight crews are to consider a runway surface as wet when there is sufficient water on the surface to cause reflective glare or when rain is falling.

5.22.3.5. Localized Hazards. RCR or RSC reports do not call attention to localized RSC hazards, i.e. standing water pools, snow, and sand drifts. Such hazards probably will not be reported unless accompanied by reduced RCR. Pilots should be alert to the possibility of this condition existing and attempt to avoid these hazards.

5.22.3.6. RCR Corrections. Do not use runways with reported RCR lower than the lowest RCR correction contained in the flight manual.

5.22.3.7. If the runway is wet and the reported RCR is higher than the MDS specific flight manual wet RCR, the actual reported RCR may be used for mission accomplishment.

5.23. Aircraft Deicing Limitations.

5.23.1. Based on recent data, flight manual time limitations are invalid. Although mil spec type fluids are similar to commercial fluids, there is no protection (holdover) time data available for mil spec type

fluids. Holdover time data is available for commercial fluids; however, it is to be used for planning purposes only, and a visual inspection immediately prior to takeoff is required.

5.23.2. When operating in continuous icing conditions, aircraft commanders will ensure their aircraft is thoroughly inspected immediately prior to takeoff (within 5 minutes) via the best method available (i.e., walk around, cherry picker type raised vehicle, aircraft doors and hatches, etc.)

5.23.3. When accomplishing the inspection from inside the aircraft, crews will make maximum use of appropriate doors, escape hatches, windows, etc.

5.23.4. At night, use of a flashlight and appropriate external aircraft lighting is required.

5.23.5. For T-tail aircraft, a visual inspection of the top of the T-tail immediately prior to takeoff may be impractical. Crews may assume that the condition of the top of the T-tail is the same as the condition of the top of the wings.

5.24. Autopilot Restrictions.

5.24.1. Departures. The autopilot will not be engaged prior to gear and flap retraction. In no case will the autopilot be engaged prior to 500' AGL on departure.

5.24.2. Approaches. The autopilot must be disengaged at or above published minimum altitude for the approach being flown or in accordance with the flight manual, whichever is higher.

5.25. Diverse Departures.

5.25.1. A diverse departure allows an aircraft to depart an airfield, climb on runway heading to 400 AGL at a minimum climb gradient of 200 feet per NM. Then proceed on course as required while continuing to maintain a minimum climb gradient of 200 feet per NM to the minimum en route altitude (MEA).

5.25.2. In DOD/NOAA publications, the absence of published departure procedures normally indicates approval for a diverse departure. Aircrews are notified of published departure procedures (required for obstacle avoidance) by the Delta T symbol on the approach plate.

5.25.2.1. Some of these airfields may not have been assessed for diverse departures or may only have had ATC departure procedures published. The absence of the delta T on the approach plate does not, therefore, mean a diverse departure is authorized. Check NOTAMS as described in the next paragraph.

5.25.2.2. MAJCOM TERPS offices are currently issuing NOTAMS for those airfields where diverse departures have not been assessed. Aircrews are prohibited from executing a diverse departure at airfields carrying this NOTAM.

5.25.3. USAF pilots will not fly diverse departures at those airfields where the United States Navy is responsible for instrument approach procedure development and maintenance. The Navy does not accomplish diverse departure assessments. These airfields are not limited to Naval Air Stations and Marine Corps air stations. The organization responsible for TERPS at a given airfield is identified parenthetically at the top of the approach plate or graphic departure procedure/SID. Navy responsibility is published as (USN).

5.25.4. Diverse departures are not authorized when departing airfields located outside the 50 United States and its territories where the US Army is responsible for instrument procedures. US Army responsibility is denoted by a parenthetical "USA" at the top of an instrument procedure.

5.25.5. USAF pilots will not depart IFR by sole reference to the IFR departure procedure, identified by a Delta T symbol on the instrument approach plate, when the IFR departure procedure only specifies a minimum ceiling and visibility. This is a see-and-avoid weather minimum and USAF aircraft may not depart IFR using see and avoid as a means of navigation. In these instances, the only authorized IFR departure methods are:

5.25.5.1. Instrument departures, identified by a Delta T symbol on the approach plate, with a specified climb gradient and/or departure routing, disregarding the see-and-avoid weather minimum if listed.

5.25.5.2. ATC departure procedures (SIDs)

5.25.5.3. ATC departure procedures (including radar vector departures). Keep in mind that a radar vector departure from a runway that only uses see-and-avoid as a departure method is likely to have an obstacle in the departure path. Departing from that runway is not authorized.

5.25.6. Airfields that do not have published departure procedures or radar service will be restricted to VFR departures only.

5.26. Aircraft Taxi Obstruction Clearance Criteria and Foreign Object Damage (FOD) Avoidance.

5.26.1. Without wing walkers, avoid taxi obstructions by at least 25 feet. With wing walkers, avoid taxi obstructions by at least 10 feet.

EXCEPTION: Aircraft at home station may delete wing-walker restriction if AFI 11-218, *Aircraft Operation and Movement on the Ground* is complied with.

5.26.2. When taxi clearance is doubtful, use one or more wing walkers. If wing walkers are unavailable, deplane one or more crewmembers to maintain obstruction clearance and provide marshaling. Use AFI 11-218 *Aircraft Operation and Movement on the Ground*, signals. The aircraft commander should use marshallers, wing walkers, deplaned crewmembers, or a crewmember positioned at a door or window to act as an observer while maneuvering on narrow taxiways. During night taxi operations, marshallers should have an illuminated wand in each hand. Observers should be in a position to observe wing walkers at all times (through door or windows) and communicate to the pilot.

5.26.3. When taxi-certified flight engineers taxi the aircraft, another taxi-certified crewmember will be in the other pilots seat (Comply with AFI 11-218**,** *Aircraft Operation and Movement on the Ground)***.**

5.26.4. FOD Avoidance. Make every effort to minimize the potential for FOD. Crews should:

5.26.4.1. Carefully review airfield layout during mission planning. Be familiar with taxi routes, turn requirements, and areas for potential FOD.

5.26.4.2. Confirm that taxi routes have been swept. If a taxi route has not been swept, consider taxiing via an alternate route.

5.26.4.3. Minimize power settings during all taxi operations.

5.26.4.4. Avoid (when possible) 180-degree turns.

5.26.4.5. If it becomes absolutely necessary to accomplish a 180-degree turn on a narrow runway, the turn should be accomplished at an intersection of a link taxiway or at a designated turn around pad.

5.27. Fuel Requirements.

5.27.1. The C-38A/C-22B should not be refueled with JP-8+100. The issue isnt one of whether the aircraft can use the fuel; its a logistical problem of mixing JP-8 and JP-8+100 in tanks at airfields. If an aircraft has JP-8+100 in its fuel tanks and defuels some of that into a fuel truck or underground tank system it gums up the fuel filters. Locations with JP-8+100 capability (mostly fighter bases) are supposed to refuel transient aircraft with “clean” JP-8.

5.27.2. As a minimum, required ramp fuel will consist of all fuel required for engine start, taxi, warm-up, APU operation, takeoff, climb, cruise, en route reserves (if required), alternate/missed approach (if required), descent, approach, and landing.

5.27.3. Alternate Fuel. As a minimum, alternate fuel will include fuel for a flight from the intended destination to the alternate aerodrome at optimum altitude and long-range cruise speed. When holding is required in lieu of an alternate at a remote or island destination, compute holding for 1 + 15. A remote or island destination is defined as any aerodrome which, due to its unique geographic location, offers no suitable alternate (civil or military) within 2 hours flying time. The forecast weather at the remote or island destination must meet the criteria listed in **Chapter 6** of this AFI.

5.27.4. Required Ramp Fuel for Extended Over-water Operations. Block to block fuel must be greater than or equal to: fuel required to fly to the ETP, experience a simultaneous engine failure and loss of cabin pressure, and proceed from the ETP to a recovery field at 10,000 feet using engine out cruise procedures. If extra fuel is required, it will be added as identified extra.

5.27.5. If passengers are not onboard and the crew is equipped with supplemental oxygen, flight may be planned and flown using recovery from the ETP at engine out Service Ceiling, instead of 10,000 feet.

5.28. Equal Time Points (ETPs).

5.28.1. If the flying time to a suitable alternate airfield exceeds 120 minutes, computed at 10,000 feet, engine out cruise speed, in still air, from any point along the route of flight, computation of an Equal Time Point (ETP) is required. Annotate it along the planned route of flight on the OPC/GNC.

5.28.2. Compute ETPs according to the following formula: FL100 ETP (nm) = (D x GSR) / (GSR + GSC) where:

5.28.2.1. D is the distance in nautical miles between destination field and recovery field (not necessarily the departure field).

5.28.2.2. GSR is the average ground speed to continue to return to a recovery field at 10,000 feet. To compute ground speed, apply forecast headwind/tailwind component at 10,000 feet to true airspeed.

5.28.2.3. GSC is the average ground speed to continue to destination at 10,000 feet.

5.28.2.4. Example: D = 1040nm, 10,000 feet winds forecast 60 knot headwind to continue, 80 knot tailwind to return. TAS at 10,000 feet, LRC, is 324 knots at std day.

5.28.2.4.1. ETP = (1040 x 404) / (404 + 264) = 629 NM from the recovery base.

5.28.2.4.2. The computation above will yield an ETP based on recovering or continuing at 10,000 feet. This is the most limiting case, and will ensure an accurate ETP in the event of an emergency such as a rapid decompression.

5.29. Classified Equipment and Material.

5.29.1. Equipment. When classified equipment is onboard, ensure aircraft security requirements are met according to **Chapter 7** of this AFI. At bases not under jurisdiction of the Air Force, ensure the aircraft and equipment are protected. AFI 13-401, Managing the Information Security Program, provides specific guidance concerning the security of various levels of classified equipment aboard aircraft.

5.29.2. Material. Ensure Communications Security (COMSEC) and other classified materials are turned in at destination and receipts are obtained for COMSEC and classified material. The on-site C2 center will provide temporary storage for COMSEC and other classified materials during en route, turnaround, and crew rest stops. If a storage facility is not available, the aircraft gun storage box or classified safe may be used for material classified up to and including SECRET. Encrypted COMSEC will only be transferred to authorized DoD personnel.

5.29.3. Identification, Friend or Foe (IFF), Selective Identification Feature (SIF). Ground check IFF/SIF prior to takeoff. IFF self-test or radar interrogation will satisfy this requirement. This check is not required on stopover flights if the IFF is operational upon landing unless required by theater directives.

5.29.4. Mode 4. Aircrews will ensure that they have an operable mode 4 when required for mission accomplishment. Aircrews will conduct an operational ground test of the mode 4 (ground test assets permitting) prior to deployment overseas, or as specified in the OPORD or contingency/exercise tasking.

5.29.4.1. Attempt to fix an inoperable mode 4 prior to takeoff. Do not delay takeoff nor cancel a mission for an inoperable mode 4, except when the aircraft will transit an area where safe passage procedures are implemented.

5.29.4.2. Conduct an in-flight check of the mode 4 on all missions departing the CONUS for overseas locations. Aircrews can request the mode 4 interrogation check through NORAD on UHF frequency 364.2. Unclassified NORAD SOCC locations and call signs are listed in **Table 5.6.**

Table 5.6. NORAD Call Signs

Sector	Location	Static	Collective
Northeast	Griffiss AFB, NY	Huntress	Back Burner
Southeast	Tyndall AFB, FL	Oak Grove	Wellington
Western	Mcchord AFB, WA	Big Foot	Deer Hunter
Alaskan	Elmendorf AFB, AL	Top Rock	Top Cover
Canada	Ea/Wenorth Bay, Can	Side Car	Brew Master

5.29.4.3. Aircraft with inoperable mode 4 will continue to their intended destinations. Repairs will be accomplished at the first destination where equipment, parts, and maintenance technicians are available. In theaters where safe passage is implemented, aircraft will follow procedures for inoperable mode 4 as directed in the applicable airspace control order or ATO.

5.29.4.4. Ground and in-flight checks of the mode 4, when conducted are a mandatory maintenance debrief items. Crews will annotate successful and unsuccessful interrogation of the mode 4 on all aircraft forms (AFTO Form 781A, AFORM Aircrew/Mission Flight Data Document).

5.29.4.5. Aircrews will carry COMSEC equipment and documents required to operate the mode 4 on missions when required per paragraph **6.42.** Prior to departing for any destination without COMSEC storage facilities, crews will ensure a safe is installed on the aircraft.

5.29.4.6. Zero Mode 4 before leaving the aircraft.

5.29.5. Mode 4 training is required semi-annually for all mission ready pilots. This activity may be accomplished on any mission, but is encouraged on missions where Mode 4 operation is mandatory.

5.30. Fuel Jettison Procedures.

5.30.1. Fuel jettison is limited to the minimum necessary for safe and effective flight operations. Except in the case of an emergency, prior to jettisoning fuel, crews will notify the appropriate ATC or flight service facility of intentions, altitude, and location. Inform the appropriate ATC or flight service facility when the operation is complete.

5.30.2. Jettison fuel only under the following circumstances:

5.30.2.1. Aircraft emergency. Immediate reduction of gross weight is critical to safe recovery of the aircraft.

5.30.2.2. Urgent operational requirements. Immediate reduction of gross weight is necessary to meet urgent operational mission tasking.

5.31. BASH Programs.

5.31.1. Bird Aircraft Strike Hazard programs are centralized unit efforts that provide information cross-feed, hazard identification, and a consolidated course of action. As a minimum, units must implement the following procedures:

5.31.1.1. Ensure compliance with the following Bird Watch condition restrictions:

5.31.1.1.1. Bird Condition Low. No operating restrictions.

5.31.1.1.2. Bird Condition Moderate. (5-15 large birds or 15-30 small birds) Initial takeoffs and final landings allowed only when departure and arrival routes will avoid bird activity. Local IFR/VFR traffic pattern activity is prohibited.

5.31.1.1.3. Bird Condition Severe. (more than 15 large birds or 30 small birds observed in the immediate vicinity of the active runway) All takeoffs and landings are prohibited unless waived by the local OG/CC or equivalent. Parent MAJCOM/DO waiver is required to operate at airfields not controlled by the military.

5.31.1.2. Make every effort not to schedule takeoffs, landings, and low-levels from one hour before to one hour after sunrise and sunset during periods when bird activity is severe. Also, sig-

nificant bird hazards will be published in FLIP GP and the IFR Supplement along with the associated airfield operating hour restrictions and avoidance instructions.

5.31.1.3. When operating at airfields where no BASH program exists, Aircraft Commanders have authority to delay takeoffs and arrivals due to bird condition. Coordinate actions through appropriate command and control authority. Aircrews experiencing high bird activity at these locations will advise their respective safety office BASH representative.

5.31.1.4. Following a birdstrike, aircrews should land as soon as conditions permit to have the aircraft inspected by qualified maintenance personnel. Birdstrike damage cannot be accurately assessed in-flight, and undetected damage may result in a complex airborne emergency; only qualified maintenance personnel on the ground can make reliable damage assessments. Consider leaving aircraft configuration unchanged until an airborne damage assessment be made. Crewmember judgment should always prevail in any situation in making a decision concerning safety of the aircrew and aircraft.

5.31.2. Further guidance and policy can be found in AF Pamphlet 91-212, Bird Aircraft Strike Hazard (BASH) management techniques.

5.32. Functional Check Flights (FCF) and Acceptance Check Flights (ACF).

5.32.1. FCFs and ACFs will be performed according to T.O. 1-1-300

5.32.2. Terms and Abbreviations:

5.32.2.1. FCFFCFs are performed after accomplishing inspections or maintenance to assure that the aircraft is airworthy and capable of mission accomplishment.

5.32.2.2. ACFACFs specify guidelines for accepting new production aircraft and to determine compliance with contractual requirements.

5.32.3. FCF Restrictions.

5.32.3.1. Conditions requiring an FCF may include (but are not limited to) major retrofit modifications, removal or replacement of moveable flight control surfaces, major repairs that would affect the flying characteristics of the aircraft, adjustment, removal, or replacement of major components of the flight control system for which airworthiness cannot be verified by maintenance operational checks, or removal or replacement of an engine.

5.32.3.2. The 201 AS/CC is responsible for the unit FCF program. The 201 AS/CC may waive a complete FCF and authorize an FCF to check only systems disturbed by maintenance, inspection or modification. Additional guidance should be published in the local chapter of these instructions.

5.32.3.3. Minimum Crew Complement. Two pilots, one of which is at least instructor qualified; instructor or higher qualified flight engineer and appropriate flight mechanics.

5.32.3.4. Check flights should be conducted within the designated check flight airspace of the base from which the flight was launched except when the flight must be conducted under specific conditions, not compatible with local conditions and area restrictions.

5.32.3.5. The decision to approve a combined FCF and ferry flight is the responsibility of the ANG/DO.

5.32.3.6. The most qualified instructor/examiner aircrews will accomplish FCFs. The 201 AS/CC issues temporary written certification designating the most highly qualified crew available.

5.32.3.7. FCFs will normally be conducted in daylight, VMC conditions. However, the 201 AS/CC may authorize a flight under a combination of VFR, IFR, and "VFR on Top" conditions. The flight will begin in VFR conditions. If the aircraft and all systems are operating properly, it may proceed IFR to penetrate cloud cover to VFR on top to continue the altitude phase of the flight.

5.32.3.8. FCF abortsIf a malfunction occurs during an FCF and is not related to the condition generating the FCF and the original condition operationally checks good, the aircraft may be released for flight once repairs are made or conditions change that aborted the FCF.

5.32.3.9. 201 AS/CC may authorize temporary waivers to these FCF procedures for aircrew qualification when operationally necessary.

5.33. Participation in Aerial Events.

5.33.1. IAW AFI 11-209, Air Force Participation in Aerial Events, all aerial events must be sanctioned and individually approved by the appropriate military authority, and coordinated with the FAA.

5.33.2. AFI 11-209 clearly identifies events sanctioned for support, and specifies the approval authority for each type. AFI 11-209 also stipulates those units participating in aerial events will ensure activities are coordinated with the FAA through the regional Air Force representative.

5.34. Hand-Held GPS.

5.34.1. Unless GPS is integrated into the C-22B flight management systems and certified for in-flight use, aircrews should carry a hand-held GPS on every off-station mission.

5.34.2. A hand-held GPS may be carried on local training missions.

5.34.3. The hand-held GPS, when operating properly, can provide useful information; however, except in an emergency, a hand-held GPS must never be used as a navigational source while flying IFR. The actual use of the hand-held GPS rests with the aircraft commander. Its usage must never jeopardize safety.

5.34.4. The Bendix KLX-100 hand-held GPS is approved for use below 10,000 ft AGL. This GPS unit meets the MIL-STD-461D requirements for radiated and conducted emissions when tested in accordance with MIL-STD-462D test methods. The KLX-100 has a VHF radio transmit capability, but the COMM function is not certified per AFI 11-202 Vol. 3, General Flight Rules. The COMM function must be disabled when the KLX-100 is operated in any AMC and AMC-gained aircraft. The VHF radio is disabled when in the GPS only mode. Use the KLX-100 in the GPS only mode, from engine-start to engine shutdown, unless the comm feature is needed in an emergency situation. Unless equipment is specifically certified for use below 10,000 ft AGL per MIL-STD 461D and MIL-STD 462D, use of the hand-held GPS is restricted to operations above 10,000 ft AGL only. Above 10,000 ft AGL, any type of hand-held GPS may be used unless interference is noted with any aircraft system.

5.34.5. Before using the hand-held GPS in-flight, aircrew members must receive training and aircraft must be capable of supporting the hand-held GPS equipment.

5.35. Use of Automation.

5.35.1. Automation allows the 201 AS to efficiently and effectively support a demanding worldwide mission. For example, technical orders, procedures, checklists, training, and supporting documents are automated to support the flying operation.

5.35.2. The crew must fully understand the operations and limitations of automated systems on the aircraft. In flight, the pilot flying (PF) will determine the most desirable level of automation for a given situation. The aircraft commander has the ultimate responsibility and authority for the safety of the passengers, crew, and aircraft. The aircraft commander must manage the workload, set priorities and employ the available resources, including automated systems, to maintain overall situational awareness.

5.35.3. Use appropriate levels of automation as required by the flight conditions. The first priority is to fly the aircraft. The Automatic Flight Director System (AFDS) and Mission Computer (MC) are intended to aid in workload management, not complicate it. As the flight situation changes, do not feel locked into any level of automation.

5.35.4. Avoid the following common pitfalls associated with over-reliance, misuse, or misunderstanding of automation:

5.35.4.1. Fixating on the automation. One pilot should always remain heads up. Establish clear roles for computer related tasks. Announce “pilot heads down” or “copilot heads down” when the task requires focusing significant attention on the mission computer in flight.

5.35.4.2. Inappropriately prioritizing programming tasks. Extensive reprogramming during critical phases of flight or during periods of high workload should be avoided.

5.35.4.3. Mode awareness. The pilot flying (PF) should make AFDS panel changes during coupled operations. During uncoupled flight, the PF should direct the pilot not flying (PNF) to make changes to the PFD or MFD panel. Confirm all mode changes by observing the correct flight mode annunciator (FMA) indications.

5.35.4.4. Assuming automation is programmed correctly. Pilots should back up each other when making PFD or MFD panel settings or programming navigation systems.

5.35.4.5. Over-reliance on automation. Practice flight operations at all levels of automation to be proficient. If the automated features are not performing as expected, take over manually.

5.36. Aircraft Recovery From Unprepared Surfaces.

5.36.1. Aircrews will normally not attempt to recover an aircraft after inadvertent entry onto unprepared surfaces not suitable for taxi. Using the appropriate equipment, ground crews will accomplish aircraft recovery.

5.36.2. Unless an emergency situation dictates otherwise, aircrews may accomplish recovery only if there is no aircraft damage, the surface will support the aircraft, and the Aircraft Commander has coordinated with appropriate maintenance authorities and 201 AS Mission Coordination Center.

5.37. Land and Hold Short Operations (LAHSO) Prohibition.

5.37.1. LAHSO are procedures for expediting traffic flow at civil and joint-use airports needing additional tools to increase capacity.

5.37.2. USAF pilots are hereby prohibited from accepting LAHSO clearances. USAF controllers are also prohibited from conducting LAHSO procedures.

5.37.3. USAF pilots are not restricted from accepting a take-off or landing clearance when a LAHSO clearance has been issued to another aircraft (passive participation). If the PIC is concerned about another aircrafts ability to comply with a LAHSO clearance the PIC should refuse a clearance that would place them in a position of passive participation.

5.38. Traffic Alert and Collision Avoidance System (TCAS).

5.38.1. It is imperative to follow resolution advisories (RA) to obtain aircraft separation computed by TCAS. Failure to follow the computed RA may increase the probability of a midair collision.

5.38.2. Visually clear the airspace before maneuvering the aircraft in response to a TCAS advisory. Advise ATC as soon as practical when a deviation becomes necessary due to a TCAS resolution advisory.

5.39. Arms and Ammunition.

5.39.1. Ammunition will not be retained in the custody of passengers or troops aboard the aircraft, but will be placed in the custody of the Aircraft Commander or designated representative.

5.39.2. Ammunition will not be carried in the chamber of a weapon taken aboard the aircraft.

5.39.3. No ammunition will be carried aboard in magazines or clips inserted in weapons except:

5.39.3.1. For a guard escorting prisoners or traveling on special order to provide security for shipment of special weapons or classified cargo.

5.39.3.2. For couriers, when required.

5.39.3.3. For special troop movements when so directed by the commanding authority.

Chapter 6

AIRCREW PROCEDURES

Section 6A—Pre-mission

6.1. Aircrew Uniform.

6.1.1. Wear the aircrew uniform, as outlined in AFI 36-2903, Dress and Personal Appearance of Air Force Personnel, on all missions, unless otherwise authorized. When the Foreign Clearance Guide requires civilian attire, wear conservatively styled civilian clothing.

6.1.2. 201 AS Aircrew Uniforms. Flight crews wear the aircrew uniform directed in paragraphs **6.1.2.** through **6.1.7.**

6.1.2.1. The primary aircrew uniform is the blue flight suit. The optional uniform is the service dress uniform as described in AFI 36-2903. The shirt will be the light blue short sleeved with or without necktie/tab, or long sleeved shirt with necktie/tab. Ribbons will not be worn on the shirt. The blue pullover sweater is authorized. Flight suits may be worn by exception at the discretion of the Aircraft Commander if no DVs are scheduled on the mission. Uniforms will be worn at all times when on duty, including travel to and from crew rest quarters.

6.1.2.2. Blue Aircrew Flight Jackets. Personnel are authorized wear of a distinctive jacket, embroidered with the "District of Columbia Air National Guard" logo. The light- weight blue jacket may be worn with either enlisted stripes or metal shoulder insignia. Officer rank will be displayed on the shoulder. The jacket will not be worn with civilian clothes off the aircraft with rank insignia attached.

6.1.2.3. In cold weather, crew chiefs, and flight engineers may wear the sage green flight jacket/ parka and/or Nomex coveralls for preflight/post-flight maintenance activities at the aircraft.

6.1.2.4. When civilian clothing is required, the crew will wear approved Air National Guard flight crew uniforms to ensure uniformity and professionalism.

6.1.2.5. All crewmembers will be dressed in the appropriate attire at station time.

6.1.2.6. The civilian coat or blazer need not be worn on the flight deck.

6.1.3. Civilian Clothing on Airlift Missions. Aircrew will fly in the designated military uniform whenever possible, however circumstances may require exceptions. The Aircraft Commander determine when civilian clothing is worn in lieu of the aircrew uniform according to these guidelines:

6.1.3.1. Wear civilian clothing when the USAF Foreign Clearance Guide (FCG) indicates that wear of the uniform is prohibited or not recommended.

6.1.3.2. Wear civilian clothing when intelligence briefings give a clear indication that wearing the uniform would not be prudent.

6.1.3.3. Wear civilian clothing when specifically requested by the DV or at any other time at the discretion of the Aircraft Commander.

6.1.3.4. Crewmembers should not be required to change clothing at the aircraft under normal circumstances. If the FCG allows you to arrive at an airport in uniform, but requires civilian clothing when leaving the airport, wear civilian clothing for that mission.

6.1.4. Locals, FCFs, and Ferry Flights. The Instructor or Evaluator determines uniforms. Maintenance personnel are authorized to wear the utility uniform.

6.1.5. Off Duty Clothing. TDY flight crews will comply with AFI 36-2903 standards, *Dress and Personal Appearance of Air Force Personnel***,** at all times, including while off duty. Clothing will present a neat, conservative appearance and be appropriate for the country and/or hotel/facilities being visited. At no time will crewmembers wear clothing with profane or obscene statements, pictures, or logos.

6.1.6. Uniforms for aircraft security NCOs (ASNCOs). ASNCOs will wear the same type clothing, military or civilian, as the rest of the aircrew. For stateside and overseas missions scheduled to RON at civilian airports or overseas missions transiting US military bases where civilian clothing is required for travel, civilian clothing will be worn while performing sentry duties. The ASNCOIC will coordinate duty uniform requirements with the Aircraft Commander prior to mission departure.

6.1.7. Personnel will have the appropriate items of clothing in their possession when flying in Arctic and Antarctic regions.

EXCEPTION: Not applicable to transoceanic flights or when staging or transiting Elmendorf AFB.

6.2. Personal Requirements.

6.2.1. Passports. Carry a valid passport on all missions scheduled to depart the CONUS. EXCEPTION: 201 AS/DO may authorize personnel who have applied for or submitted passports for renewal to act, as crewmembers on missions not scheduled to transit locations where passports are required. Aircraft Commanders are responsible for ensuring passports (with applicable visas) are included in the mission kit.

6.2.2. Shot Record. Ensure immunization requirements are met. Carry shot records on all missions outside the 48 contiguous states. 201 AS crewmembers must maintain worldwide immunization requirements.

6.2.3. Corrective Lenses. Comply with AFI 11-202, Vol. 3, *General Flight Rules*.

6.2.4. Driver's License. A valid state driver's license is required on each TDY where use of US government general-purpose vehicles may be required. Contact the local airfield manager if the vehicle will be operated on the flight line.

6.2.5. Identification (ID) Tags. Each crewmember will carry or wear two ID tags.

6.2.6. Rings and Jewelry. Crewmembers will remove all finger rings and loose fitting jewelry prior to performing aircrew duties.

6.2.7. Flashlight. Each crewmember must carry an operable flashlight at night.

6.3. Aircrew Publications Requirements.

6.3.1. Current MDS aircraft applicable flight manuals, performance manuals, and abbreviated checklists are located on the aircraft.

6.3.2. Aircraft commanders must ensure that required publications are aboard, current and in good condition prior to each flight.

6.3.3. The Squadron operations officer may modify this process provided local procedures are defined.

6.3.4. In addition to Tech Orders and Flight Manuals, aircrew are responsible for the information located in the following publications:

Table 6.1. Aircrew Publications

Publications	Pilots	Flight Engineers	FAs	Instructors	Evaluators
AFI 11-202, V1, *Aircrew Training*				**X**	**X**
AFI 11-202, V2, *Aircrew Standardization/Evaluation program*					**X**
AFI 11-202, V3, *Flying Operations*	**X**	**X**	**X**	**X**	**X**
AFI 11-2DVG, V1, *201st AS Aircrew Training*				**X**	**X**
AFI 11-2DVG, V2, *C-22B/C-38A Evaluation Criteria*				**X**	**X**
AFI 11-2DVG, V3, *DV Guard Flying Operations Procedures*	**X**	**X**	**X**	**X**	**X**
AFMAN 11-217, V1, *Instrument Flight Procedures*	**X**				
AFMAN 11-217, V2, *Instrument Flight Procedures*	**X**				
AFI 11-218/AMC1, *Aircraft Operation and Movement on the Ground*	**X**	**X**	**X**	**X**	**X**
AFI 11-218 ANG Sup 1, *Aircraft Operation and Movement on the Ground*	**X**	**X**	**X**	**X**	**X**
AFI-11-401, *Flight Management*	**X**			**X**	**X**
AFI 11-401/AMC1, *Flight Management*	**X**			**X**	**X**
AFI 11-408/AMC1 (holdover), *Aircrew Standardization/Evaluation Program Organization and Administration*					**X**
FA Training guide			**X**		

Section 6B—Pre-Departure

6.4. Mission Planning and Airfield Review.

6.4.1. The Aircraft Commander is responsible for all mission planning, foreign clearance requirements, and coordination of all support requirements.

6.4.2. The following are suggested review areas:

6.4.2.1. Airspace/Airfield Review. Flip, fir/uir/adiz procedures.

6.4.2.2. Airspace classifications, ASRR, and airport qualification videos (if available).

6.4.2.3. Theater Instrument Procedures. Required instruments and/or procedures for Non-DOD Approaches, course reversal approaches, circling, holding, NDB approaches, Host Nation/Jeppesen Approaches, STARS, SIDS, En route navigational charts and Altimeter setting procedures.

6.4.2.4. Organized Track Systems. Minimum Navigation Performance Specifications (MNPS) Airspace requirements; North Atlantic and Pacific Region Track Systems.

6.4.2.5. Communication and Emergency Procedures. Command and Control, Over-water position reporting, lost communications procedures, emergency procedures, and weather information sources.

6.4.2.6. Border Clearance. Foreign Clearance Guide, Customs, Immigration, Agriculture, Insect and Pest Control, and Diplomatic Clearances.

6.4.2.7. Flight planning. DD Form 1801, Jeppesen Computer Flight Plan, Jeppesen Approach Plates and Charts, Theater Weather Conditions, Fuel Reserves and Alternate Requirements, Equal Time Points/Critical Wind Factors, and International NOTAMs.

6.4.2.8. Special Military Operations. Altitude Reservations, AOR procedures, and Due Regard.

6.4.2.9. Other Regulatory Requirements. General navigation procedures, Life Support equipment, hazardous cargo, crew rest/crew duty time, aircraft records/AFTO 781 procedures, mission essential ground personnel/additional crewmembers, passenger handling, etc.

6.4.2.10. Location Information. Command and control/reporting procedures, maintenance problems, aircraft security, social customs and taboos, billeting, transportation, etc.

6.4.2.11. Tasking and itinerary. When mission confirms, contact the users mission contact. Inform the contact officer that excessive carry on baggage cannot be stowed in the passenger compartment.

6.4.2.12. Risk assessment worksheet. The Aircraft Commander is responsible for completing a risk assessment worksheet prior to every mission departing the local area and obtaining signature approval as necessary. Current Operations will forward any request for threat assessment/force protection support to TACC as required.

6.4.2.13. Foreign Clearance. Review the USAF Foreign Clearance Guide (FCG), including the classified supplement. Ensure the planned itinerary can be flown in compliance with the provisions of the FCG. If not, obtain an exception to the FCG through proper diplomatic channels or plan and coordinate an itinerary change. Note where visas are required, and ensure the passport control NCO and the aircrew schedulers are aware of visa requirements. Start visa processing as soon as possible.

6.4.2.14. Flight Itinerary. Calculate itinerary times and prepare a 201 AS/OPS Form 2, Flight Itinerary. Itinerary leg times are block-to-block times (door closed to door open) and include time

for taxi-out, takeoff, climb, descent, approach, landing, and taxi-in. For planning purposes, use true airspeeds. Obtain forecast wind factors to compute an estimated ground speed. Apply this to the route distance (including mileage for known off course maneuvering for SIDs/STARs). Add the block time factor. This factor is adequate to account for normal vectoring delays and nominal taxi distances. Adjust this block time factor as necessary if a procedure turn will be required or if there will be excessive taxi times (such as Hickam AFB HI). Round the total up or down to the nearest five minutes. Add 20 minutes to get an estimated block time.

6.4.2.15. FLIPS and COMSEC. Coordinate for worldwide FLIPs and sufficient communications security (COMSEC) materials for the duration of the mission.

6.4.2.16. Anti-Hijacking. Review anti-hijacking procedures (AFI 13-207, *Preventing and Resisting Piracy* [*Hijacking],* and **Chapter 7** of this AFI).

6.4.2.17. Terrain Charts. Obtain terrain charts for unfamiliar destinations, if available.

6.4.2.18. Seat Release. If applicable, release available seats to passenger terminal.

6.5. Messages.

6.5.1. Advance notice and/or diplomatic clearance messages are required for all missions to destinations outside the CONUS, including flights to Alaska, Hawaii, and Puerto Rico. Exact requirements and addressees for each country are found in the USAF FCG.

6.5.2. Current Operations will assist with message preparation and type messages from your handwritten drafts. Normally, messages will not be released until the crew has made contact with the mission contact officer to confirm itinerary details. The Aircraft Commander or other designated crewmember will proofread typed messages before Current Operations releases them.

6.5.3. 201 AS Current Operations releases all messages pertaining to 201 AS missions. For alert missions and other short notice or non-duty hour requirements, expedite your diplomatic clearance requests and advance notice messages by using immediate or night action (NIACT) immediate precedence. Initial contact by telephone is acceptable but should be followed by a message. The Aircraft Commander is responsible for obtaining the required clearances. The 201 AS Current Operations assists as requested, but the Aircraft Commander must ensure the required clearances are obtained.

6.5.4. DOD and USAF policy guidance require protection of DV foreign travel itineraries. The following procedures apply:

6.5.4.1. For unclassified missions operating outside the United States, US possessions, or Canada, do not include the name of the DV in unclassified messages. Diplomatic clearance and advance notice messages should be sent unclassified/encrypt for transmission only/for official use only (UNCLAS/EFTO/FOUO). (If a station does not have EFTO capability, send them a separate message with the information they need.) Send a separate message, classified at least confidential, to all addressees to identify the DV party. This message should contain downgrade instructions to allow downgrade to unclassified after the mission returns to home station. Whenever possible, include a statement that classified information may be released to foreign governments on a close hold basis when required to obtain diplomatic clearances. All other internal mission paperwork will be unclassified; however, any follow-up message traffic must not identify the DV party in connection with the mission number, aircraft number, or the published itinerary.

6.5.4.2. Messages pertaining to DV travel solely within the United States, US possessions, and Canada may include the DV party identification and will be sent UNCLAS/EFTO/FOUO.

6.5.4.3. If the mission itinerary is classified, all message traffic must be classified at the appropriate level. Confer with the mission contact officer to determine the appropriate classification. Try to keep the classification level to confidential whenever possible. All internal mission paperwork must also be classified.

6.5.4.4. Whenever possible, comply with the lead time requirements of the USAF FCG. If this is not possible, comply with the short notice procedures in the FCG General Information Booklet.

6.5.4.5. Do not include request for crew support (hotel reservations, transportation, etc.) in the advanced notice/diplomatic clearance request messages. Send a separate message to the appropriate action addressees only. If you have personally arranged any aircraft/crew support, indicate these arrangements in your messages so the local support agencies will not duplicate your efforts.

6.6. En Route Support.

6.6.1. Aircraft Commanders are responsible for arranging all en route support. For most foreign missions, arrange support by tasking the local Defense/Air Attaché by message. For all CONUS missions (and as necessary for foreign missions), Aircraft Commanders or a designated representative, will personally contact each destination to arrange support.

6.6.2. When a mission or portion of a mission is canceled or changed, the Aircraft Commander, or designated representative, is responsible for advising affected support agencies or attaches.

6.7. Parking, Servicing, and Aircrew Requirements.

6.7.1. Guard and Reserve Facilities. On missions to CONUS civil airports with a military facility (ANG/AFRC) capable of providing support, 201 AS policy requires the use of the military facility however, there are exceptions. If the mission will arrive or depart outside the normal operating hours of the military facility (nights, weekends, or holidays) use a civilian facility (terminal, FBO ramp, etc.) provided you are able to arrange the necessary support. If the using agency requests use of a civilian facility in preference to an available military facility, use the civilian facility. If your DV party has a requirement to use the military facility, make arrangements to use the military facility. In general, avoid requiring ANG/AFRC units to work overtime in support of 201 AS missions unless the using agency has a specific need to use the military facility or suitable support cannot be obtained from civilian sources.

6.7.2. Contract Servicing Agents. When you plan to use civilian facilities for parking or servicing, refer to the Avfuel and Avoil Into Plane Contract Listing available in the Mission Coordination Center. Use the government contractor unless you cannot obtain the required services. If your mission requires parking away from the contractors ramp, try to obtain refueling from the designated contractor however, don't taxi to the contractors ramp solely for refueling. Use a credit card or AF Form 315, USAF Avfuel Invoice, if you must purchase fuel from other than the designated contract vendor. Submit an Aircraft Commanders Trip Report, explaining the circumstances.

6.7.3. Border Clearance. Missions entering or departing the United States will normally use a regular or special foreign clearance base (FCB), a civil international airport of entry (AOE), or a landing rights aerodrome as specified in the FCG. Military inspectors at special FCBs are only authorized to clear aircraft participating in the special projects listed for each base in the FCG. When aircraft not

participating in the approved special projects require clearance, the special FCB base commander must obtain advance approval from US border clearance officials in order to clear the aircraft. Aircraft must not transit a special FCB for clearance unless advance approval is confirmed. If the mission requires, arrangements can be made to use any suitable CONUS airfield, but the Aircraft Commander must coordinate border clearance inspections with all appropriate government agencies in advance. Refer to the USAF FCG and applicable AF Instructions.

6.7.4. Security Support. Standard message formats include security support. If ASNCOs are assigned to the mission, the senior ASNCO can assist in arranging support. However, security support arrangements are the Aircraft Commanders responsibility.

6.7.5. Aircrew Billeting. Use government facilities to the maximum extent practical on missions. Crew integrity is a mission requirement. Aircraft Commanders must know where their crewmembers are at all times. Itinerary changes are common and often require immediate action by crewmembers. To provide crew control, all crewmembers should be billeted at the same facility at en route stops. Aircraft Commanders must have a "class A" or equivalent phone in the room. The mission contact officer/escort and the controlling agency must know the location of the crew and how to contact them. Crew integrity does not require the whole crew to be billeted together in a BOQ. "Billeted at the same facility" means billeted on the same base or at the same hotel complex; however, if the whole crew is not together, the Enlisted Aircrew Coordinator (EAC) must have a room phone. When government quarters are available, but not suitable, use an AF Form 2282, Statement of Adverse Effect - Use of Government Facilities, to justify the non-use. Air Force regulations do not require an AF Form 2282 or a non-availability statement if the total ground time is less than 24 hours. Government quarters when they are available, should be used to the maximum extent practical, regardless of the scheduled ground time. Aircraft Commanders use these criteria when evaluating the suitability of available government quarters:

6.7.5.1. Can the crew respond to the needs of the DV party if they must fly immediately?

6.7.5.2. Can the crew receive adequate uninterrupted crew rest?

6.7.5.3. Are adequate eating facilities available?

6.8. Cabin Service.

6.8.1. Meals will not normally be offered on JOSAC missions due to the unpredictability of schedules.

6.8.2. For all other missions, determine if meal/beverage service is desired. Arrange for the mission FA to call the contact officer directly to coordinate menus and other cabin service requirements.

6.8.2.1. Aircraft Commanders normally should not discuss meal requirements with the contact officer. If the mission FA is not available, the Aircraft Commander should ask the FA scheduler to make contact and pass on the requirements to the mission FA.

6.8.2.2. Confirm payment arrangements for meals and beverage service. If charges will be billed, obtain the complete billing address. If a mission cancels at the request of the using agency after the FA has purchased supplies, the Aircraft Commander, or Chief FA, will advise the contact officer to the costs of all non-returnable items.

6.9. Advance Per Diem.

6.9.1. Normally, advance per diem will not be paid to crewmembers; they should use their government provided credit cards. When the mission requires an advance that is too large to reasonably collect from an automatic teller, the Operations Administration Section will assist in arranging advance per diem payments.

6.9.2. On missions where substantial cash payments are anticipated for aircrew transportation and other incidental official crew expenses, the Aircraft Commander will designate a transportation officer to receive an additional advance and be responsible for these payments. Refer to the Joint Travel Regulation for information about per diem rates and procedures to follow when applying for special per diem allowances.

6.10. Other planning factors.

6.10.1. The Current Operations section and Mission Coordination Center serve as points of contact between controlling agencies and crewmembers. During mission planning and itinerary coordination, crewmembers needing to coordinate with the controlling agency should work with these contacts as applicable.

6.10.2. All mission information is considered "FOR OFFICIAL USE ONLY" and crewmembers will not discuss the mission or any DV information with anyone not having a need to know. Unclassified missions may be designated "CLOSE HOLD". In this case, certain mission details are restricted from normal release. Clarify the applicable restrictions prior to any mission planning or coordination activities.

6.10.3. Prearrange your predeparture weather briefing with Andrews' AFB forecaster. Provide all details needed to prepare your weather briefing. Do not request "social weather forecast" for "CLOSE HOLD" missions.

6.10.4. Mystic Star HF support is available and should be used for all 201st AS OCONUS missions. Aircraft Commanders must arrange support. Current procedures are described in the 201st AS Mystic Star Support Procedures package.

6.10.5. Arrange for spare parts as required. C-22B Aircraft Commanders or a designated crewmember will coordinate mission support kit requirements with the aircraft crew chief. Aircraft Commanders on extended overseas missions to areas where support facilities are limited may request certain spares be issued for a particular trip. Coordinate requirements with 201 AS maintenance through MCC.

6.11. Itinerary Coordination.

6.11.1. Use the following procedures when confirming and planning itinerary details:

6.11.2. Preposition for DV pickups. Plan to preposition for DV pickups one hour prior to the scheduled departure time. Aircraft Commanders may request preposition on the night prior to an early morning pickup depending on aircraft and crew availability. Early preposition may also be requested to allow adequate crew rest prior to an extended crew duty day. Coordinate request for early preposition with MCC.

6.11.3. Configurations. Aircraft configuration requirements will be coordinated with the controlling agency by the Aircraft Commander or designated representative. Ensure all requests and changes are

coordinated through MCC. Requests must be finalized NLT two working days prior to mission departure.

Section 6C—Pre-departure

6.12. Airfield Certification.

6.12.1. All crewmembers and staff mission planners should review airport qualification audiovisual slide tape programs as available before operating missions into unfamiliar airfields.

6.12.2. Aircrews will review the Airfield Suitability and Restrictions Report (ASRR) and should contact HQ AMC/DOVS for updates to airfield operability and weight bearing capability. ANG/DO may waive the airfield certification requirement.

6.13. Aircrew Intelligence Briefing.

6.13.1. Prior to leaving home station on missions departing the CONUS, crews will receive an intelligence briefing that will emphasize terrorist, enemy, and friendly political and military development in the area in which they will be flying.

6.13.2. Once in theater, aircrews should receive intelligence updates on initial arrival at a forward operating location (FOL) or en route stop and thereafter when significant developments occur.

6.13.3. Report information of possible intelligence value to the local intelligence officers at the completion of each mission.

6.14. Flight Crew Information File (FCIF) Procedures.

6.14.1. Review FCIF, volume 1, part A, before all missions or ground aircrew duties, and update the FCIF currency record with the date, and crewmember's initials.

6.14.2. Crewmembers delinquent in FCIF review or joining a mission en route will receive an FCIF update from a primary aircrew member counterpart on the mission. Instructor pilots who fly with general officers are responsible for briefing appropriate FCIF items.

6.14.3. Crewmembers not assigned or attached to the unit operating a mission will certify FCIF review by entering the last FCIF number and their initials behind their name on the file copy of the flight authorization.

6.14.4. Aircraft Commanders will ask 201 AS/DOV for any pertinent FCIF changes released after departing home station.

6.15. Flight Crew Bulletins (FCB).

6.15.1. FCBs are issued under provisions of AFI 11-202 vol. 2, *Aircrew Standardization/Evaluation ProgramOrganization and Administration.* 201 AS Stan/Eval will be the OPR for FCBs.

6.15.2. Items in FCBs may include local procedures and policies concerning equipment and personnel generally not found in any other publications.

6.15.3. All crewmembers will be knowledgeable of FCB contents.

6.16. Airfield Security.

6.16.1. When departing on missions destined outside the CONUS, Aircraft Commanders will review applicable MAJCOM security publications.

6.16.2. Identify airfields and coordinate with the Current Operations for airfields requiring Secure Launch procedures and PHOENIX RAVEN.

6.17. Mission Kits.

6.17.1. Carry mission kits on all operational missions. Mission kits will contain all forms necessary for safe and efficient conduct of the mission. 201 AS/DO will determine and publish the contents of the mission kit. MCC will prepare the mission kits. The AC is responsible for the contents of mission kits for their mission. Suggested items include:

6.17.1.1. Publications. Squadron FCB

6.17.1.2. Forms.

6.17.1.2.1. DD Form 175, Military Flight Plan

6.17.1.2.2. DD Form 1351-2, Travel Voucher or Sub-voucher

6.17.1.2.3. DD Form 1351-2c, Travel Voucher or Sub-voucher (Continuation Sheet)

6.17.1.2.4. DD Form 1801, DOD International Flight Plan

6.17.1.2.5. DD Form 1854, US Customs Accompanied Baggage Declaration

6.17.1.2.6. DD Form 2131, Passenger Manifest

6.17.1.2.7. Customs Form (CF) 7507, General Declaration Outward/Inward

6.17.1.2.8. AF Form 15, United States Air Force Invoice

6.17.1.2.9. 201 AS/OPS Form 2, Itinerary Worksheet

6.17.1.2.10. AF Form 315, United States Air Force AvFuels Invoice

6.17.1.2.11. AF Form 457, USAF Hazard Report

6.17.1.2.12. AF Form 651, Hazardous Air Traffic Report (HATR)

6.17.1.2.13. AF Form 2282, Statement of Adverse Effect- Use of Government Facilities

6.17.1.2.14. AMC Form 54, Aircraft Commander's Report on Services/Facilities, or MAJCOM Equivalent

6.17.1.2.15. AMC Form 97, USAF Aircraft Mishap Report Worksheet

6.17.1.2.16. TAX EXEMPT forms

6.17.1.2.17. AMC Form 196, Aircraft Commanders Report on Crewmember

6.17.2. Mission documentation.

6.17.2.1. AF Form 1631, NATO Travel Orders (when required)

6.17.2.2. AMC Form 41, Flight Authorization, or MAJCOM equivalent

6.17.2.3. Itinerary

6.17.2.4. Mission Coordination worksheets (to include JOSAC messages

6.17.3. Miscellaneous.

6.17.3.1. List of important telephone and beeper numbers for coordination

6.17.3.2. Aircrew Roster with telephone numbers

6.17.3.3. Mission Briefing Guide

6.18. Route Navigation Kits.

6.18.1. The Aircraft Commander is responsible for the contents of route navigation kits. Kit contents are determined by the mission itinerary. Include all publications, charts, and forms needed to fly the mission, and comply with all FLIP and FCG requirements. Route navigation publications, charts, and forms for areas of routine operations may be kept on the aircraft. Aircraft Commanders will verify the currency of route navigation publications prior to departure from home station. Cockpit congestion is a problem on all 201 AS aircraft. If available, utilize part of the forward compartment baggage bin on the C-22 to store kits.

6.18.2. Aircraft Route Navigation Kits. The route navigation kits maintained on each aircraft include sufficient charts, approach booklets, SIDs/STARs and supplements for any CONUS mission. When a mission is planned to depart the CONUS, the Aircraft Commander will check out a supplementary kit from Current Operations. Include a copy of the USAF FCG and the FLIP Planning Document. Return supplementary kits immediately upon return to home station.

6.19. Briefing Requirements.

6.19.1. Pre-mission Briefings. Before departing home station, the Aircraft Commander will conduct a pre-mission briefing. The Aircraft Commander will brief crewmembers on all aspects of the mission using 201 AS/DOV developed and approved briefing guides. Omit items that do not apply. Overseas missions will also require a crew briefing in advance of the departure date. As a minimum, at least one person from each crew position will attend this overseas mission briefing.

6.19.2. Mission Briefing Guide.

6.19.2.1. General Mission Requirements.

6.19.2.1.1. Mission number

6.19.2.1.2. Call sign

6.19.2.1.3. Tail number

6.19.2.1.4. Flight orders

6.19.2.1.5. FCIF

6.19.2.1.6. Mission kit.

6.19.2.2. Departure/Enroute Review.

6.19.2.2.1. Itinerary.

6.19.2.2.2. Departure times

6.19.2.2.3. Pax loads/codes

6.19.2.2.4. Fuel loads

6.19.2.2.5. Parking locations/spot

6.19.2.2.6. Servicing

6.19.2.2.7. PPR numbers

6.19.2.2.8. Payment methods

6.19.2.2.9. Meal requirements for Pax and crew

6.19.2.2.10. Jump seat usage.

6.19.2.3. Mission Factors.

6.19.2.3.1. Weather

6.19.2.3.2. NOTAMs

6.19.2.3.3. Airfield restrictions

6.19.2.3.4. Performance factors

6.19.2.3.5. Security/anti-hijacking.

6.19.2.4. RON requirements.

6.19.2.4.1. Billeting

6.19.2.4.2. Transportation

6.19.2.4.3. Show-time

6.19.2.5. Overseas requirements.

6.19.2.5.1. Intelligence reports

6.19.2.5.2. Customs

6.19.2.5.3. Diplomatic clearances/routes

6.19.2.5.4. Visas/passports/shot records

6.19.2.5.5. Uniform requirements.

6.19.2.6. Aircrew Procedures/Requirements.

6.19.2.6.1. Emergency Procedures.

6.19.2.6.2. Abort procedures

6.19.2.6.3. Evacuation order/Plan

6.19.2.6.4. Passenger accounting.

6.19.2.7. Crew Resource Management.

6.19.2.7.1. Coordinating back end/front end emergencies

6.19.2.7.2. Identification/resolution of problems

6.19.2.7.3. “Time out” concept.

6.19.2.8. Crew Conduct.

6.19.2.8.1. In-flight

6.19.2.8.2. Crew rest

6.19.2.8.3. Safety concerns

6.19.2.8.4. Remove rings

6.19.2.8.5. Use hearing protection.

6.19.3. Takeoff Briefings. Conduct a thorough briefing prior to every takeoff to all cockpit crewmembers. Review number of souls on board, airspeeds, radios, climb-out procedures, and factors affecting the climb out. (Noise Abatement procedures, weather, etc.) Discuss actions in the event of a reject or an emergency return. Identify any factors which would affect either a reject or an emergency return such as, weather, length of runway, runway conditions, available approaches, departure alternates, etc. Address positive control of aircraft and CRM factors.

6.19.4. En Route Briefings. Conduct crew briefings en route as required. Prior to entering crew rest, the Aircraft Commander will brief the crew on the requirements for the next mission leg. Route and leg briefings should be conducted for every leg prior to departure with applicable crewmembers or a designated representative for each crew specialty. Aircraft Commanders should keep on-board contacts informed of mission specifics, changes, problems, etc. Use the "Departure/En route Review" section of the briefing guide.

6.19.5. Weather Briefings. AFI 11-202 Vol. 3, *General Flight Rules* applies. Obtain a briefing on current weather, trends, and forecasts for the proposed route, destination, and alternates.

6.19.5.1. Obtain weather information from US Military weather services, any FAA-approved weather source, or any host nation civil or military weather source.

6.19.5.2. If the flight will transit non-Air Force bases, crews must make arrangements to ensure adequate weather support facilities and services are available. If adequate services are not available; crews will obtain weather support through any means available to ensure required weather data is in their possession prior to mission accomplishment.

6.19.5.3. When face-to-face briefings are not possible, obtain a telephone weather briefing (precedence up to and including IMMEDIATE is authorized). Exception: verbal weather briefings are acceptable for local area training missions. FAA weather briefs may be obtained at 1-800-WX-BRIEF.

6.19.6. Approach Briefings. Conduct a briefing prior to beginning descent for an approach for all cockpit crewmembers. Identify approach to be flown, procedures, minimums, weather, lighting, missed approach procedures, back up approaches, etc.

6.20. Buffer Zone/SAFE PASSAGE Procedures.

6.20.1. Prior to operating an aircraft within or adjacent to an established buffer zone, the pilot will ensure primary crew members are briefed on current buffer zone procedures outlined in appropriate directives.

6.20.2. Pilots must be familiar with peacetime and wartime safe passage of friendly military aircraft (if applicable).

6.21. Flight Data Verification.

6.21.1. Aircrews should acquaint themselves with the mission and individual sortie requirements to ensure successful mission accomplishment. Squadron staff should monitor crew activity and be available to resolve problem areas.

6.21.2. Computer Flight Plan (CFP) Use. Contracted CFPs or CFPs available from Det 1, AMC CPSS are official sources of performance, navigation, and climatic data, including en route wind information. If stand-alone microcomputer based plans are used, each mission segment should utilize best wind data available. Only current, command validated (ANG/DO) microcomputer programs will be used.

6.21.3. Flight crews may manually compute flight plans, use mainframe based or contracted CFPs, or utilize CFPs provided by the staff. CFPs should be utilized to the maximum extent practical. The flight crew has final responsibility for accuracy of the flight plan used.

6.21.4. The flight crew will verify CFPs for route definition and fuel computation accuracy prior to departure. Range summary charts will be used to determine the validity of CFP fuel burn rates.

6.21.5. Two crewmembers should verify takeoff and landing data.

6.22. Departure Planning.

6.22.1. Gross Weight. Ensure that the aircraft does not exceed the maximum gross weight, zero fuel weight, or center of gravity limitations specified in the applicable MDS aircraft flight manual. Gross weight may be further restricted by operating conditions such as wind shear, icing, temperature, pressure altitude, runway length and slope, airdrome weight bearing capacity, departure maneuvering, required climb gradients, and obstacles.

6.22.2. Specific ATC Departure Instructions/Climbout Performance. Appropriate terrain charts must be reviewed prior to departure. The aircraft must be able to achieve the published climb gradient (for the runway to be used) with all engines operating, and be able to vertically clear all obstacles within the climb-out flight path with one engine inoperative. If no minimum climb gradient is published, use 200 ft/NM (3.3%) minimum with all engines operating and 152 ft/NM (2.5%) minimum with one engine inoperative. If a higher required climb gradient is published, use that climb gradient as the minimum with all engines operating, and use that climb gradient minus 48 ft/NM (.8%) as the minimum with one engine inoperative. This only works at fields having an instrument approach. If the field does not have an instrument approach, then no obstacle survey has been conducted; therefore, you dont know if 200/152 ft/NM is sufficient. At airfields with no instrument approach, an IFR departure is not authorized. In all cases, the minimum engine out climb gradient is 2.5% (152 ft/NM).

6.22.3. SIDs. OPRs for SIDs are identified on each individual SID. They may either be Federal Aviation Administration (FAA), United States Army (USA), United States Navy (USN), United States Marine Corps (USMC), or United States Air Force (USAF).

6.22.4. Published IFR Departure Procedures. Published IFR departure procedures (DP) are available at some civil and military fields to assist in avoiding obstacles during climb to the minimum en route altitude (MEA). Airfields with published IFR departure procedures will have the inverted triangle with a white "T" symbol printed on the approach plates and SIDS. When using Jeppesen publications, IFR departure procedures will be on the airfield diagram page, typically on the reverse side of the airports first approach. A climb gradient and/or specific routing and/or alternate takeoff weather

minimums will normally be specified with a published IFR departure procedure. When flying a published IFR departure procedure, depicted routing and climb gradients must be flown to avoid obstacles. The Alternate takeoff weather minimums allow civil aircraft to depart with minimum ceiling and visibility. Military aircraft are not authorized to use these alternate takeoff weather minimums. If the published IFR departure procedure does not include either a routing or a minimum climb gradient (i.e., it includes only alternate takeoff weather minimums) then an IFR departure from that airfield IS NOT AUTHORIZED unless you fly a SID or depart via radar vectors.

6.22.5. Specific ATC Departure Instructions. (Specific climb-out instructions or "radar vectors"). Crews may depart via specific ATC departure instructions; however, the SID prescribes a safe route of flight for a climb to the en route structure, while minimizing radio communication. Even if you plan to depart via specific ATC departure instructions, the crew shall still have the SID on board (if published).

6.22.6. VFR Departures. VFR departures are authorized when required for mission accomplishment. The weather at takeoff must permit a VFR climb to an IFR MEA, an appropriate IFR cruising altitude or an altitude where radar vectors can be provided. In no case will VFR departures be flown in lieu of obstacle clearance planning.

6.22.7. Climb-out Performance. Specific climb performance is not linear. Performance manual gradients represent a snap shot view of the aircraft's climb capability at the instant the gear is fully retracted. Since aircraft climb-out is not linear, do not equate required climb gradient to aircraft climb profile. The only way to ensure obstacle clearance is to plot all significant obstacles on the climb-out flight path charts contained in the performance manual. If there is any doubt about the aircraft's ability to clear all obstacles in the event of an engine failure, plan an engine out, visual escape route that includes the departure and emergency return routing.

6.23. Obstacle Clearance Planning.

6.23.1. Obstacle Identification Surface (OIS). Obstacle identification for SID purposes (FAA Handbook 8260.3B, AFM 55-9, UV *Standard for Terminal Instrument Procedures (TERPS)*) are those objects that penetrate an OIS of 40:1 (152 feet per NM)). Calculation of the OIS on a SID continues until the SID reaches a MEA or until the SID terminates. Climb gradients of 200 feet per NM, or published climb gradients, will provide at least 48 feet per NM clearance above all obstacles that do not penetrate the OIS. The aircraft commander must be aware and thoroughly brief the crew on all obstacles along the departure flight path.

6.23.1.1. The AMC Airfield Suitability and Restrictions Report (ASRR) is an excellent source for obstacle information; however, it is not a stand-alone document. It is intended to supplement published climb gradients and obstacle information found on SIDs, Published IFR Departure Procedures, and terrain charts.

6.23.1.2. Aircrews may call 89 OSS/OSOF or HQ AMC/DOA (DSN 576-6316) for more airfield obstacle data.

6.23.2. Objects may or may not be depicted. (They definitely will not be depicted on civil procedures) Objects that are not depicted still require careful consideration in takeoff planning since aircraft climb-out is not linear. The only way to ensure obstacle clearance on any departure is to plot all significant obstacles. (AMC report in the investigation of Hazard Report 60AMW99-03. This report states: "…neither a TPC or JOG shows adequate close-in detail for proper departure obstacle analysis close

or below the OIS. TPC legend specifically states that "All vertical obstructions 200 feet AGL and higher cannot be portrayed due to chart scale and feature density.' and 'Vertical Obstructions, including power lines, have been extracted from the most reliable sources available, however, there is no assurance that all are shown or that their locations and heights are exact,' and 'numerous contour tops may be missing,' and 'Basic interval 500 feet, Intermediate contours shown at 250 feet and 750 feet,' Conceivably, nothing at all might be depicted up to 448 feet (249+199), making the map inadequate for the four, and most critical nautical miles from takeoff." Additionally, recent discussions with NIMA reveal 17,000 uncharted cellular phone towers in the United States, 4000 of which are above 200 feet.)

6.23.3. SIDs simplify ATC procedures while providing safe routing to the en route structure; however, SIDs should not be used as the sole source of obstacle information for departure planning. If used as such, inadequate (engine out) obstacle clearance may result. SIDs, instrument approach plates, and topographical sectional charts must be used to determine the distance and height values for all significant obstacles along the flight path.

6.23.4. Obstacles are not normally depicted on SIDs when climb gradients of less than 152 feet per NM are required to clear them.

6.23.5. In order to file/fly an instrument departure, aircrews will first compute an engine-out climb gradient during mission planning.

6.23.5.1. If the engine-out climb gradient is sufficient to provide obstacle clearance, but is not sufficient to meet the published/required departure climb gradient, you may still depart. In this case, reduced or no margin of safety for obstacle clearance exists. You must ensure the departure climb gradient can be met with all engines operating.

6.23.6. If the engine-out climb gradient (published gradient minus the 48 ft/min buffer or 152 ft/nm if no gradient is published, whichever is greater) is not sufficient to clear the obstacle, the crew may consider the following options:

6.23.6.1. Downloading cargo.

6.23.6.2. Downloading fuel.

6.23.6.3. Delaying the mission until weather factors allow for sufficient performance.

6.23.7. If none of these options are feasible, after review by and at the discretion of the Aircraft Commander, depart only if all of the following apply:

6.23.7.1. Day/VMC conditions exist on the entire departure and planned emergency return routing.

6.23.7.2. The aircraft is (still) capable of achieving the minimum published climb gradient (200 ft/NM if none published) with all engines operating.

6.23.7.3. The Aircraft Commander has determined through a review of all applicable maps and charts that, in the event of an engine failure, the planned departure and emergency return routing will allow for obstacle avoidance.

6.23.7.4. The planned emergency route is briefed to the entire crew.

6.23.8. In the event of an engine failure, aircrews will advise ATC of their inability to comply with the required climb gradient.

6.23.9. Aircrews will operate under IFR rules to the maximum extent possible. VFR departures, as defined by AFI 11-202, Vol 3 *General Flight Rules* are allowed only when mission essential and departure cannot be conducted under IFR. These departures require at least the same detailed planning to ensure obstacles and high terrain are avoided. Crews will not take-off VFR at night unless it is mission essential, cannot be conducted IFR, there is sufficient terrain information available and sufficient aircraft performance is available to vertically clear all obstacles on the departure and emergency return route with an engine inoperative.

6.23.10. Aircrew must comply with procedures for clearing end-of runway obstacles and restrictions in the Airfield Suitability and Restrictions Report (ASSR).

6.24. Takeoff Minimums and Departure Alternates.

6.24.1. Weather Minimums for Takeoff. At or above authorized ceiling and visibility landing minimums.

6.24.2. If weather is below landing minimums, you may still depart under the requirements shown in **Table 6.2.**, however, you must have a suitable departure alternate.

Table 6.2. Minimum Departure Weather

RVR is 16 or greater (visibility ¼ mile or greater)
OR
RVR is 12 or greater at the approach end and 10 or greater at the departure end and runway center. The runway must have operating centerline lighting and dual RVR display slave readouts for both approach and departure ends of the runway.

6.24.3. Do not use CAT II minimums to determine if a departure alternate is required.

6.24.4. Suitability of Departure Alternates. When a departure alternate is required, the aircraft must be capable of maintaining the MEA or MOCA; whichever is higher, to the alternate using one engine-out performance criteria. To qualify as a departure alternate the airfield must meet one of the conditions of **Table 6.3.**

Table 6.3. Departure Alternate Weather Minimums

Weather at an alternate within 30 minutes flying time must be equal to or better than the published approach minimums and forecast to remain so until 1 hour after takeoff, but in no case forecast to be lower than existing 200-1/2 (RVR 2400)
OR
The existing weather, at an alternate within 1hour flying time, must be at least 500-1 above the lowest compatible published approach minimums. In no case, lower than 600-2 for a precision approach or 800-2 for a non-precision approach, and forecast to remain so for 1 hour after ETA at the alternate.

6.25. Destination Requirements (for filing purposes *)*

6.25.1. The forecast destination weather and required weather for selecting an alternate will be according to AFI 11-202, Vol. 3, *General Flight Rules*.

6.25.2. File two alternates when:

6.25.2.1. The forecast weather is less than required minimums for the lowest compatible approach.

6.25.2.2. The forecast surface winds (intermittent or prevailing) exceed limits corrected for RCR.

6.25.3. File an alternate, regardless of forecast weather, when the departure or destination aerodrome is outside the 48 contiguous states.

6.25.4. When filing to a remote or island destination, aircrews will use 1+15 holding fuel (in lieu of an alternate and 45 minutes holding fuel). A remote or island destination is defined as any aerodrome which, due to its unique geographic location, offers no suitable alternate (civil or military) within 2 hours flying time. The forecast weather at the remote or island destination must meet the following criteria:

6.25.4.1. The prevailing surface winds, corrected for RCR, must be within limits at ETA and forecast to remain so for 2 hours thereafter, and

6.25.4.2. The prevailing ceiling and visibility must be equal to or greater than published minimums for an available non-precision approach (excluding ASR), for ETA plus 2 hours.

6.25.4.3. If a precision approach is available, the ceiling or visibility may be intermittently below non-precision approach minimums (excluding ASR), but not below precision approach minimums (for ETA plus 2 hours).

6.25.5. When filing to a destination where the alternate is located in Alaska or at latitudes greater than 59 degrees, aircrews will use 1+15 holding fuel in lieu of 45 minutes holding fuel.

6.25.6. Compute holding fuel using planned destination gross weight.

6.26. Adverse Weather.

6.26.1. Except when using commercial Type II de-icing fluids, takeoff in freezing drizzle is prohibited. Refer to Flight Manual for further limitations.

6.26.2. During flight, use any means available to avoid thunderstorms by at least:

6.26.2.1. 20 NM at or above flight level (FL) 230.

6.26.2.2. 10 NM below FL 230.

6.26.3. Do not fly directly above (within 2,000 feet) thunderstorms or cumulonimbus clouds. If unable to vertically clear thunderstorms or cumulonimbus clouds by at least 2000 feet, you must avoid them by using the above criteria. Thunderstorms, 20 miles or more away may damage aircraft. Aircrews must familiarize themselves with information on thunderstorm development and hazards. Refer to AFH 11-203, *Weather for Aircrews*.

6.26.4. In order to minimize exposure to thunderstorm hazards when approaching or departing an airport in an area where thunderstorms are occurring or are forecast:

6.26.4.1. Attempt to maintain VMC.

6.26.4.2. Maintain at least 5 NMs separation from heavy rain showers

6.26.4.3. Avoid areas of high lightning potential, i.e. in clouds plus or minus 5,000 feet (or temperatures ± 8 Degrees C) of the freezing level.

6.26.4.4. Approaches or departures may be accomplished when thunderstorms are within 10 NMs. The thunderstorms must not be producing any hazardous conditions (such as hail, lightning, strong winds, gusts fronts, heavy rain, wind shear, or micro-bursts) at the airport. Thunderstorms must not be forecast or observed to be moving in the direction of the route of flight (to include the planned missed approach corridor, if applicable).

6.26.5. Aircrews performing approaches and landings at locations where temperatures are 0 degrees centigrade or below will refer to the Flight Information Handbook, section D, Temperature Correction Chart, for corrections to Minimum Descent Altitude (MDA), decision height (DH) and other altitudes inside the final approach fix (FAF) if required.

6.26.6. Do not fly into an area of known or forecast moderate or greater mountain wave turbulence. Crews should use good judgment when flying into any area conducive to mountain wave turbulence, and avoid these areas of potential turbulence when possible.

6.26.6.1. Mountain wave turbulence is normally a predictable condition. Forecasters at base weather stations, using guidance products from weather centers, can advise crews of the potential for encountering mountain wave turbulence along planned routes of flight.

6.26.6.2. Weather data availability in mountainous regions and forecast model limitations prevent the prediction of all events.

6.26.6.3. Crews must be familiar with the causes of mountain wave turbulence and the characteristic clouds that generally forewarn its presence.

6.26.7. Flights are prohibited into areas of forecast or reported severe icing or severe turbulence.

6.26.8. Turbulence. Knowledge of the tropopause flight level will help in altitude planning to avoid turbulent flight areas. Ask the weather briefer for the tropopause flight level whenever possible. Turbulence can be expected ±4000 feet of this altitude.

6.27. Fuel Conservation.

6.27.1. Conservation of fuel requires everyone's active participation. For every pound of excess fuel, 3 percent of the excess will be burned each hour. Do not carry extra fuel for convenience.

6.27.2. Cruise speed. Normal cruise speeds are as follows: C-22B: Mach .82, C-38A: Mach .80. Use high-speed cruise only when needed to satisfy the requirements of the DV.

6.27.3. Extra fuel (identified extra) may be added to Required Ramp Fuel Load (RRFL):

6.27.3.1. When fuel availability is limited or not available at en route stops.

6.27.3.2. When compressed ground times during single multi-day sortie missions preclude refueling at en route stops.

6.27.3.3. When en route refueling would delay or be detrimental to mission accomplishment.

6.27.3.4. For known holding delays in excess of standard.

6.27.3.5. For anticipated off-course weather avoidance to include avoidance of forecast turbulence detrimental to passenger comfort.

6.27.3.6. If the aircraft should decompress with passengers on board, causing a descent to an unplanned altitude resulting in consumption in excess of planned fuel, add fuel to recover at a suitable alternate at the appropriate altitude.

6.27.3.7. To offset increased fuel consumption due to icing.

6.27.3.8. When destination NAVAIDS, ATC services, or landing aids are unreliable or insufficient.

6.27.4. Planning guidelines for fuel conservation:

6.27.4.1. Use optimized CFPs when possible.

6.27.4.2. Long range cruise (LRC) and optimum altitude should be flown.

6.27.4.3. Limit the use of the APU when possible.

6.27.4.4. Delay engine start.

6.27.4.5. Cruise CG should be aft if practical.

6.27.4.6. Fly en route descents when possible.

6.27.5. Fuel loads. Use **Table 6.4.** guidance when fuel planning for 201 AS MDS aircraft.

Table 6.4. Fuel Planning

Fuel Load Component	**MDS Aircraft Type**	
	C-22B	**C-38A**
APU, Start, Taxi, Takeoff	1500 lbs. + APU usage. (50#/min.)	200 lbs.
En Route (See *NOTE* 1)	Use appropriate flight manual “flight planning chart”.	
En Route Reserve	Fuel for planned climb and cruise to overhead destination at cruise altitude or initial approach fix altitude. Fuel for 10% of flight time over Cat. I route/route segments not to exceed 1+00 Hr at normal cruise.	
Alternate, if required and the destination weather is at or above the published ceiling and visibility minimums. (See *NOTE* 2) **OR**	Fuel over destination to alternate at planned speed and altitude.	
Missed Approach plus **Alternate**, if destination weather is below published ceiling or visibility minimums. (See *NOTE* 2)	1000 lbs. plus fuel from the destination to alternate using charts for planned climb and cruise profile.	300 lbs. plus fuel from the destination to alternate using charts for planned climb and cruise profile.

Fuel Load Component	MDS Aircraft Type	
Reserve	4,000 lbs. when no alternate is required. This includes 45 minutes reserve and 1500lbs. approach/landing fuel. When an alternate is required, reserve and approach/ landing fuel is included in alternate fuel figures.	700 lbs. when no alternate is required. This includes 45 minutes reserve and 200lbs. approach/landing fuel. When an alternate is required, reserve and approach/ landing fuel is included in alternate fuel figures.
Holding	45 minutes fuel at 10,000 feet using endurance or holding charts. When holding in lieu of an alternate is required, or when the alternate is located in Alaska or latitudes greater than 59 degrees north/south, use 1+15 fuel. Holding fuel should be computed at the alternate. See note 3.	
Known Holding Delays	Fuel for planned holding when delays are anticipated en route or at high traffic density airports.	
Minimum fuel required over destination, or over alternate (if required)	Fuel for required holding approach and landing, plus 8,000 lbs.	Fuel for required holding, approach, and landing plus1000 lbs.

NOTES

1. Include all planned off-course maneuvering for departure or en route deviations.
2. If two alternates are required, compute fuel from destination to most distant alternate.
3. Holding for 0+45 Hr is based on 10,000 MSL; holding for 1+15 Hr is based on 20,000 MSL.

6.27.5.1. Standard Ramp Fuel Loads. This is normally the minimum fuel load for all missions departing Andrews AFB. If you require less than the standard fuel load due to runway length or conditions at nearby destinations, notify the Mission Control Center immediately. They will notify maintenance to refuel or defuel your aircraft to desired fuel load. Aircraft will not be defueled solely for the purposes of fuel conservation. Standard ramp fuel loads, planned local training flying times, scheduled ground times between locals, and minimum landing fuel are shown in **Table 6.5.**

Table 6.5. Standard Fuel Loads and Local Turn Times

	Fuel Load	Flying Time	Ground Time	Minimum Fuel
C-22B	33,000 lbs.	2.0 hours	1+15 hours	8000 lbs.
C-38A	4000 lbs.	2.0 hours	1+15 hours	800 lbs.

6.28. Standby/Alert Mission Pre-departure Procedures.

6.28.1. Standby/Alert missions include any mission where the scheduled departure time is less than 12 hours after original notification.

6.28.2. Procedures for standby/alert missions will vary depending on the type mission, type of aircraft and time available between notification and departure. Procedures also vary depending on time of day (i.e., duty hours or non-duty hours). The following general procedures apply in most cases:

6.28.2.1. The standby/alert Aircraft Commander will be notified of a standby/alert mission by the Mission Control Center or aircrew scheduler. When notified, the following will be covered:

6.28.2.1.1. The mission number, departure spot, expected departure time, DV name and position, and number of passengers. If the mission is supporting another unit aircraft, you may be instructed to log mission symbol S-7 and you will not be given a mission number.

6.28.2.1.2. The itinerary details which are available.

6.28.2.1.3. Fuel load requirements.

6.28.2.1.4. Threat assessment and airfield security information as applicable.

6.28.2.1.5. Items you want briefed to your crewmembers during notification. You should specify aircrew uniform or civilian clothes.

6.28.2.2. FAs normally require cash for purchases. Cash is available from the 201 AS In-flight Service Fund (ISF) during duty hours.

6.28.2.3. For immediate launches overseas during duty hours, Current Operations and/or the scheduler will arrange for passports, shot records, flight plans, weather briefs and navigation kits to be available to the aircrew at show time. For missions departing immediately, the duty scheduler (during duty hours) will file a flight plan for the first mission leg. Current Operations will prepare and dispatch diplomatic clearance and advance notice messages. If you have adequate notice prior to departure, you may accomplish pre-launch flight planning yourself.

6.28.2.4. The duty scheduler will notify the rest of the crewmembers. They will be briefed on the mission/aircraft numbers, departure time, where the aircraft is/will be spotted, required fuel load, general itinerary and number of days away, and any items the Aircraft Commander has designated for briefing.

6.28.2.5. Pilots should ask clearance delivery for a full route clearance when the aircrew scheduler files the flight plan.

Section 6D—Preflight

6.29. Required items on Aircraft.

6.29.1. The Aircraft Commander is responsible for ensuring all required items are on board prior to flight.

6.29.2. The following items are required for flight:

6.29.2.1. Flight Manual

6.29.2.2. Weight and Balance Manual (C-22B)

6.29.2.3. Performance Manual (C-22B)

6.29.2.4. Required flight publications (as defined by local procedures)

6.29.2.5. Checklists

6.29.2.6. Approach plates/charts/supps/FIH

6.29.2.7. Location Identifier Book (C-22B)

6.29.2.8. Forms kit

6.29.2.9. Aircraft Forms (781)

6.29.2.10. DOD identaplate

6.29.2.11. AVCARD

6.30. AFTO Form 781, AFORM Aircrew/Mission Flight Data Document.

6.30.1. Review the AFTO Form 781, AFORM Aircrew/Mission Flight Data Document before applying power to the aircraft or operating aircraft systems. The exceptional release must be signed before flight.

6.30.2. A maintenance officer or maintenance superintendent normally signs the exceptional release. If one of these individuals is not available, the Aircraft Commander may sign the exceptional release. Ensure that the Air Force fuel identaplate is aboard the aircraft.

6.31. Aircraft Servicing and Ground Operations.

6.31.1. Aircraft Refueling and Defueling. Qualified FEs, crew chiefs and C-38A pilots are authorized to refuel or defuel their aircraft. Comply with the appropriate dash-2 aircraft T.O.s and TO 00-25-172.

6.31.2. Concurrent Ground Operations. Simultaneous refueling or defueling while maintenance operations are being performed is authorized according to T.O. 00-25-172.

6.31.2.1. Aircrew members are authorized to enplane or deplane during fuel servicing to perform mission essential duties.

6.31.2.2. Aircrew personnel are authorized to conduct "power off" portions of inspections during servicing when essential to meet operational turn-around requirements. (Reference TO 00-25-172, paragraph 4.12.)

6.31.2.3. Passengers may remain on board the aircraft during refueling, provided they are briefed on the hazards of the operation and given the option to deplane prior to refueling. Passengers will not enplane or deplane during fueling operations unless absolutely necessary and escorted by an aircrew member. A standby fire truck is required (Reference TO 00-25-172, paragraph 6.10c) Passengers may use laptops and cellular phones onboard the aircraft during concurrent servicing, however, they must not change the batteries on these devices during fueling.

6.31.3. En Route Aircraft Preflights. Aircrew will accomplish aircraft preflights following crew rest. If the ground time will exceed 72 hours or if the aircraft has been left unattended, aircrews should accomplish an aircraft inspection/walk-around of the aircraft within 24 hours of scheduled departure when practical. Anytime en route maintenance has been performed, the affected systems will be preflighted and should be operationally checked as soon as possible if practical. Thru-flight inspections will be completed anytime a preflight is not required. FAs only need to accomplish a thru-flight inspection at en route stops. Pilots will ensure flight controls are checked during the taxi checklists.

6.32. Oxygen Requirements. The minimum quantity of oxygen aboard an aircraft before takeoff must be sufficient to accomplish the planned flight from the equal time point (ETP) to recovery should oxygen be required.

6.33. Fleet Service Equipment. Ensure required fleet service items are aboard 45 minutes prior to departure to permit enough time for an inventory.

6.34. Life Support Equipment

6.34.1. Prior to departing home station or en route stations, the Aircraft Commander or designated representative will ensure appropriate life support and survival for the entire or remainder of the mission, are aboard the aircraft.

6.34.2. Minimum Life support equipment is shown in **Table 6.6.**

Table 6.6. Minimum Life Support Equipment

EQUIPMENT	C-22/B	C-38/A
Smoke Mask	1	
Mask, Oxygen Quick don or Scott series with goggles	4	3
EEBDs	4	1
Drop down masks	144	9
Signal kit	1	
46 Person Life Raft	2	
4 Person Life Raft		2
Life Preservers	99	11
Survival Kit	1*	1*

*Life raft accessory kit contains emergency survival items.

6.34.3. Missing Equipment. Aircrew members discovering equipment missing will accomplish the following:

6.34.3.1. Make an AFTO Form 781, **AFORM Aircrew/Mission Flight Data Document** entry for equipment found missing. Additionally, ensure equipment removed from the aircraft at an en route station is documented in the AFTO Form 781.

6.34.3.2. Advise the Aircraft Commander and determine whether the missing equipment should be recovered or replaced before mission continuation.

6.34.3.3. Assist, as required, in preparing reports of survey for missing equipment.

6.34.3.4. When possible, advise HQ AMC/DOTL (or airport management) before mission continuation

6.35. Crash Position Indicators (CPI) and Emergency Locator Transmitters (ELT).

6.35.1. ELTs must be operative for all flights except in the local area. If an ELT activates inadvertently, notify the ATC agency immediately.

6.35.2. Flight data recorder (FDR) and cockpit voice recorder (CVR) systems, if installed, should be operative prior to departure and operated continuously from the start of the takeoff roll until the aircraft has completed landing roll at destination. If en route failure occurs, continue the mission to a station where adequate repairs can be made. If involved in a mishap or incident, open the CVR power circuit breaker after landing and after terminating the emergency. CVR recordings are privileged communications and are to be used solely for mishap prevention purposes. CVR recordings may not be used for disciplinary action according to AFI 91-204, *Investigating and Reporting US Air Force Mishaps.*

6.36. Handling of Classified Cargo, Registered Mail, NMCS/VVIP/FSS Shipments, Courier and Hazardous Material.

6.36.1. These shipments are normally not carried on 201 AS passenger aircraft. Aircraft Commanders may accept or decline shipments at their discretion based on mission requirements or crew or aircraft capabilities. Receipts will be obtained for classified cargo, NMCS/VVIP/FSS shipments, signature services, and registered mail at the on-load and off-load station using the cargo manifest.

6.36.2. Defense Courier Service (DCS) couriers are authorized to designate officer and enlisted (E-5 and above) crew members on military aircraft as couriers to escort and safeguard courier material when other qualified personnel are not available. Qualified passengers will be designated prior to designating crewmembers. The following restrictions apply.

6.36.2.1. Primary crewmembers will not be designated without the consent of the Aircraft Commander.

6.36.2.2. Crewmembers on aircraft scheduled to stop at locations where DCS couriers cannot provide en route support will not be designated as couriers. This does not relieve the Aircraft Commander of the responsibility for life and death urgent shipments.

6.36.3. During stops at en route locations supported by DCS stations, DCS couriers are required to meet designated couriers to protect the material.

6.36.3.1. During unscheduled stops, crewmembers may place courier material in temporary custody of the following agencies listed in descending order of priority:

6.36.3.1.1. DCS courier

6.36.3.1.2. TOP SECRET control officer of the US armed forces

6.36.3.1.3. US Department of State diplomatic courier

6.36.3.1.4. US Department of State activity

6.36.3.1.5. US military guards

6.36.3.1.6. US DOD civilian guards

6.36.3.2. If unable to follow the itinerary to the destination of the courier material, or if material is lost, stolen, or otherwise compromised, report circumstances to the nearest armed forces courier station and notify the local US military commander or US government activity.

6.36.4. Only Class C explosives are accepted on passenger aircraft. Ensure hazardous material is properly packaged and documented. Consult local authorities if available.

6.36.4.1. Not more than 440 pounds of dry ice, ORM A will be carried in any one compartment. Dry ice and animals should never be in the same bin. Animals will be loaded in the front bin only.

6.36.4.2. Compressed gas cylinders must have safety caps and be loaded securely to avoid shifting. Not more than 150 pounds net weight of non-flammable gas will be carried in any inaccessible cargo compartment.

6.36.4.3. Corrosives should never be loaded closer than 6 feet to flammable solids, oxidizers or organic peroxide.

6.36.4.4. In no case will hazardous material be transported in the cabin on any 201AS aircraft.

6.36.4.5. For the C-22B, hazardous material should be loaded in the aft cargo hold.

6.37. Crew Station Times.

6.37.1. The Aircraft Commander or a designated crewmember will have the flight plan on file not later than one hour prior to departure (2 hours for DD Form 1801, DOD International Flight Plan). Be familiar with the local requirements where you are filing. Some stations require you to file 24 hours in advance.

6.37.2. Crewmembers will normally be at their duty stations with all checklists accomplished up to the point of engine start not later than 30 minutes prior to departure. Crewmembers will be prepared to depart as expeditiously as is safely possible if the DV arrives early.

Section 6E—Departure

6.38. On Time Takeoffs.

6.38.1. A delay is charged any time the DV and passengers are ready to move at the scheduled departure time and the aircraft is not ready for departure.

6.38.2. A delay is charged when the aircraft cannot depart due to maintenance or operational problems.

6.39. C-22B/C-38A Cabin Security Procedures During Takeoff and Landing.

6.39.1. The FAs should assure all carry-on luggage and supplies are secured as soon as possible after boarding passengers. Ensure all passenger carry-on baggage is stowed to prevent a hazard during emergency landings, i.e.. blocking an exit or emergency equipment. Notify the Aircraft Commander when excessive baggage topside precludes safe stowage. (The copilot will assume these responsibilities on the C-38A)

6.39.2. The 1st FA will coordinate with the Aircraft Commander the anticipated taxi time prior to commencing any cabin service prior to takeoff.

6.39.3. The 1st FA will notify the cockpit crew of the number of passengers on board prior to taxi. Do not taxi the aircraft until all passengers are accounted for and are seated. The 1st FA will report that the cabin is secure prior to being seated for takeoff or landing.

6.39.4. The Flight Engineer will report clearance for takeoff using the PA system, and ensure FAs are seated.

6.40. Departure Monitoring.

6.40.1. When cleared for takeoff, the pilot not flying will state "cleared for takeoff". All cockpit crewmembers will visually check the final approach course and the runway prior to taking the active runway.

6.40.2. The pilot not flying the aircraft will monitor the departure and report any deviation from the planned departure. The pilot flying the aircraft will announce intentions periodically throughout the departure.

Section 6F—En route

6.41. Flight Progress/Oceanic Plotting Charts. (Overseas).

6.41.1. Prior to flight, plot the oceanic portion of the flight on an appropriate chart. Annotate the chart with the mission number, Aircraft Commander's name, and date. If practical, chart may be reused.

6.41.2. Anytime waypoint data is inserted into the INS, it will be verified by two primary crewmembers. Check both the coordinate information and the distances between waypoints against the flight plan.

6.41.3. In-flight, use all available navigational aids to monitor INS performance. Immediately report malfunctions or any loss of navigation capability that degrades centerline accuracy to the controlling ARTCC. Use the following procedures for flight progress:

6.41.3.1. Obtain a coast out fix prior to, or immediately on entering the Category I Route or over-water segment. Perform a gross error check using available NAVAIDS and annotate the position and time on the chart.

6.41.3.2. When approaching each waypoint, recheck coordinates for the next waypoint.

6.41.3.3. Approximately 10 minutes after passing each oceanic waypoint, record and plot the aircraft position and time on the chart, and ensure compliance with courses and ETA tolerances. Compare fuel usage to fuel required after each entry.

6.41.3.4. If a revised clearance is received, record and plot the new route of flight on the chart.

6.41.3.5. Maintain a fuel management log for any category I route mission when the flight time between suitable en-route airfields within 50nm of flight plan course exceeds 5 hours.

6.41.4. Upon return to home station, turn in the charts (copies if reused) and applicable computer flight plans to Current Operations. Current Operations will retain the charts, CFPs, and associated materials for a minimum of 3 months.

6.42. Operations in International/Territorial Airspace.

6.42.1. U.S. military aircraft and DOD personnel entering another nation to conduct US government business must have the approval of the foreign government concerned to enter their airspace. Foreign clearances for US international air operations are obtained through US officials known as Defense Attaché Officers (DAOs). Refer to FLIP GP for discussion of international strait passage, archipelagic sea-lane passage, procedures to follow if intercepted, and other foreign sovereignty issues.

6.42.2. There are essentially two types of airspace: international airspace and territorial airspace. International airspace includes all airspace seaward of coastal states' territorial seas. Military aircraft operate in such areas free of interference or control by the coastal state. Territorial airspace includes airspace above territorial seas, archipelagic waters, inland waters, and land territory and is sovereign airspace. Over-flight may be conducted in such areas only with the consent of the sovereign country.

6.42.3. Consistent with international law, the US recognizes sea claims up to 12 nautical miles. Diplomatic constraints and/or a lack of diplomatic clearances usually result in missions operating in international airspace. Because of this, it is imperative sufficient information be provided far enough in advance to allow compliance with FCG requirements established by the countries concerned. The US does not normally recognize territorial claims beyond 12 nautical miles; however, specific guidance from certain US authorities may establish limits that differ from the standard.

6.42.4. See FLIP, FCG, AP, and MDS series instruction for further guidance

6.43. Flight Information Region (FIR).

6.43.1. A FIR is defined as an area of airspace within which flight information and related services are provided. A FIR does not reflect international borders or sovereign airspace. Aircraft may operate within an established FIR without approval of the adjacent country, provided the aircraft commander avoids flight in sovereign airspace.

6.43.2. Aircrews on a flight plan route that takes them from international airspace into territorial airspace for which approved aircraft clearances were obtained should not amend entry point(s).

6.43.3. Violations of foreign sovereignty result from unauthorized or improper entry or departure of aircraft. Aircrews should not enter into territorial airspace for which a clearance has not been duly requested and granted through diplomatic channels.

6.43.4. Air traffic control agencies are not vested with authority to grant diplomatic clearances for penetration of sovereign airspace where prior clearance is required from the respective country. Aircraft clearances are obtained through diplomatic channels only.

6.43.5. In the event air traffic control agencies challenge the validity of a flight routing or attempt to negate existing clearances, pilots must evaluate the circumstances. The normal response will be to advise the air traffic control agency that the aircraft will continue to the planned destination as cleared in international airspace. The key phrase is "in international airspace." Safety of flight is paramount in determining mission continuation. Under no circumstances should aircrews construe a clearance, which routes their mission over sovereign airspace not approved through diplomatic channels prior to mission departure, as being valid authorization.

6.43.6. Aircrews operating missions requiring unique or specially developed routing will normally be briefed at home station, on-load station, and/or by the last C2 facility transited prior to performing the critical portion of the mission.

6.43.7. Aircrews are normally not tasked to and should not fly "due regard" routing unless specifically directed in the mission frag or coordinated with proper authorities. The "due regard" or "operational" option obligates the military Aircraft Commander to be their own air traffic control agency and separate their aircraft from all other air traffic. If operational requirements dictate, Aircraft Commanders may exercise the "due regard" option to protect their aircraft. When the threat has terminated, the aircraft will return to normal Air Traffic Services. Refer to FLIP GP for guidance on due regard.

6.44. Altitude Reservations.

6.44.1. Aircraft Commanders will ensure ALTRV approval is received prior to mission execution. Aircrews needing to check the status of their ALTRV may contact Current Operations.

6.44.2. ALTRVs usually include a 1 hour AVANA (ALTRV Approval Void if Aircraft Not Airborne) to account for delays. If a mission delays more than 1 hour, coordination with the appropriate central altitude reservation facility will be required. It may be possible to extend the AVANA time. If not, a new ALTRV will be required. Begin coordination as soon as the delay is known.

6.44.3. Requests for ALTRVs do not eliminate the responsibility to obtain diplomatic clearance or file flight plans. The complete route of flight must be included in DD Form 1801, DOD International Flight Plan, DD Form 175, Military Flight Plan, or other equivalent host nation flight plan.

6.45. Navigational Aid Capability.

6.45.1. North Atlantic minimum navigation performance specification (MNPS) airspace and US West Coast and Hawaii route system procedures are as follows:

6.45.1.1. Minimum Navigation Performance Specifications standards (FLIP AP/2) are mandatory.

6.45.1.2. Aircraft that lose one INS prior to airspace entry will comply with FLIP AP/2.

6.45.1.3. Aircraft that lose all INS capability prior to designated airspace entry may continue if the crew re-files outside MNPS airspace or outside the Hawaii-Mainland United States composite route structure and NAVAIDs (or navigator) are available to maintain proper navigation tolerances.

6.45.2. Reduced Vertical Separation Minimum (RVSM) Airspace. Airspace where RVSM is applied is considered special qualification airspace.

6.45.2.1. Both the operator and the specific aircraft type must be approved for operations in these areas. Refer to FLIP AP/2 and the following for RVSM requirements.

6.45.2.2. Document (in the aircraft forms) malfunctions or failures of RVSM required equipment, including the failure of this equipment to meet RVSM tolerances.

6.46. CIRVIS and Other Reports.

6.46.1. Report all vital intelligence sightings from aircraft as indicated in FLIP planning or FLIP En route Supplement.

6.46.2. In-Flight harassment or hostile action against 201 AS aircraft. Aircraft subjected to harassment or hostile action by foreign aircraft will immediately contact the nearest US Air Force air and ground voice facility and report the encounter. Include aircraft nationality, type, insignia, or any other identifying features; note position, heading, time, speed when harassed, and the type of harassment. Request relay of the report to the nearest C2 CENTER. Also attempt to contact the nearest command post when in UHF and VHF range.

6.46.3. Other incidents will be reported as indicated in JCS Pub 6, Volume 5, and AFM 10-206, *Operational Reporting.*

6.47. Communications.

6.47.1. HF Communications. Confine message traffic to essential operational matters. Perform an HF radio ground check prior to takeoff when the use of HF radio may be required for ATC or C2 communications. Establish HF contact before going out of UHF and VHF range. If unable to establish HF contact with the controlling HF station and an alternate means of relay of ATC information in oceanic areas is not available, return to the nearest suitable support base.

6.47.2. General. Provide ARTCC position and weather observations when required. If unable to contact an ATC agency, attempt relay through the GLOBAL HF stations.

6.47.3. AF Form 72, Air Report (AIREP). When directed by departing weather facility, take and record an AIREP at each position report over a Category I Route. Identify inaccurate CFP winds by special report if the average wind for a route segment exceeds either 30 degrees error in wind direction or 25 knots in wind speed. Turn in completed AF Form 72 to the destination USAF weather facility.

6.48. In-Flight Emergency Procedures.

6.48.1. Report deviations from directives that may occur as a result of an emergency in accordance with AFI 11-202 Vol. 3, *General Flight Rules* and this directive.

6.48.2. Notification of Controlling Agencies. When practical after completing the aircraft emergency action checklists and associated actions crews should furnish the controlling agency and appropriate C2 CENTER a description of the difficulty, assistance required, intentions, and any other pertinent information.

6.48.3. A CONFERENCE SKYHOOK may be initiated when additional expertise is necessary to cope with emergencies or other conditions. Use the following telephone numbers through phone patch facilities to contact the In-flight Emergency Operator:

6.48.3.1. C-22B: (Boeing) 1-800-721-0422, 1-206-9200 or DSN 743-5687

6.48.3.2. C-38A: (Galaxy) 1-800-852-1125

6.48.4. Relay that you are a military aircraft, type aircraft and nature of the emergency. A technician will be paged so expect minor delays while contacts are arranged. Provide the following information when time permits.

6.48.5. Narrative description of the situation to include actions taken by the crew and the intentions of the Aircraft Commander.

6.48.5.1. Fuel on board and hours of endurance.

6.48.5.2. Position.

6.48.5.3. Altitude and flight conditions.

6.48.5.4. Number of personnel and distinguished visitors (DV) on board.

6.48.5.5. Qualification of Aircraft Commander.

6.48.5.6. Planned landing base.

6.48.5.7. ETA at landing base.

6.49. Need for Medical Assistance.

6.49.1. When a person aboard the aircraft requires medical care, inform the station of intended landing in sufficient time for medical personnel to meet the aircraft.

6.49.2. Include the sex, approximate age, and the major complaint in the request.

6.50. Weather Forecasts.

6.50.1. It is the pilot's responsibility to obtain destination weather prior to descent.

6.50.2. The primary means is any US Air Force base weather station via pilot-to-meteorologist service (PMSV) or through a US Air Force aeronautical station. Check on the latest weather prior to descent or landing.

6.50.3. The ATC system can provide weather information to en route aircraft.

6.50.3.1. The ARTCCs have a limited capability to provide weather information to en route aircraft within CONUS.

6.50.3.2. SIGMET (significant meteorological information) advisories will be transmitted from the servicing ATC unit. Crews will consider all SIGMETs valid for their aircraft unless verified as not applicable with a military METRO service.

6.50.4. Weather Support in EUCOM. All transient aircrews operating in EUCOM should use the USAFE operational weather squadron (USAFE OWS) at Sembach AB to receive weather planning data and mission execution forecast if no local weather flight service is available. If needed, the TACC weather flight is available to support when off station. If an aircrew needs to reach the OWS, they can use any of the following methods.

6.50.4.1. Telephone. DSN 496-6145/6 or Comm 06302-67-6145.

6.50.4.2. Fax. DSN 496-6176 or Comm 06302-67-6176.

6.50.4.3. E-mail. **mailto:ows.ops@sembach.af.mil**.

6.50.4.4. Internet. **http://ows.sembach.af.mil**.

6.50.4.5. STU-III. DSN 496-6190.

6.50.5. Mobility Aircraft Weather Support in SOUTHCOM AOR. The 25th operational weather squadron (25 OWS) at Davis-Monthan AFB is the en route weather information source for Central America (except Mexico), South America and Caribbean. If needed, the TACC weather flight is also available to support. The 25 OWS can be reached by any of the following methods.

6.50.5.1. Telephone. DSN 228-1977/2027/2138 or Comm (520)-228-1977/2027/2138.

6.50.5.2. Fax. DSN 228-1284 or Comm (520)-228-1284.

6.50.5.3. E-mail. **25OWS@dm.af.mil**.

6.50.5.4. STU-III. DSN 228-2055.

6.51. Diversions.

6.51.1. Prior to divert, if time and conditions warrant, ensure you check at least the following:

6.51.1.1. Weather.

6.51.1.2. NOTAMs.

6.51.1.3. Airfield suitability.

6.51.1.4. Customs/Port of entry.

6.51.1.5. Operating hours; available services.

6.51.2. Notify the divert airfield as soon as possible to allow maximum time to prepare the required assistance or services.

6.51.3. If necessary, advise the appropriate C2 center and request assistance in arranging substitute airlift for passengers that are aboard.

Section 6G—Arrival

6.52. Descent.

6.52.1. Prior to descent into unfamiliar areas, appropriate terrain charts (Operational Navigation Chart (ONC), Sectional Aeronautical Chart, Tactical Pilotage Chart (TPC), or Joint Operations Graphic (JOG)) should be reviewed to increase aircrew situational awareness of obstructions.

6.52.2. Primary crewmembers will not be involved in duties other than aircraft operations, descent and approach monitoring, and required checklist items from the initial descent point to landing.

6.53. Instrument Approach Procedures.

6.53.1. Weather Minimums. Prior to starting an instrument approach or beginning an en route descent, pilots will confirm that existing weather is reported to be at or above required minimums for the lowest compatible approach. Pilots flying DOD or NOAA non-precision approaches or approved published non-DOD/NOAA approaches may start the approach only if the existing weather is at or above both ceiling and visibility minimums for the approach. Pilots flying DOD or NOAA precision approaches will continue to use that criteria contained in AFI 11-202, Vol 3. Pilots shall increase the published visibility minimums of an instrument approach by 1/2 SM or as noted in NOTAMs, on ATIS, or on the approach plate, when the runway approach lighting system (ALS) is inoperative. (This applies only to the ALS, not to VASIs, PAPIs, and other lights that are not a component of the ALS).

6.53.2. Night and Marginal Weather Operations. Fly a precision approach, if available, at night or during marginal weather. If a precision approach is not available, fly any available approved instrument approach. During night VMC conditions, if an approved instrument approach is not available, a visual approach may be flown as long as the intended runway has some type of visual glide slope indicator (VASI, PAPI, etc.). On training and evaluation flights at familiar fields, pilots may fly non-precision approaches or VFR traffic patterns to accomplish required training and evaluations. The pilot not flying the approach will monitor a precision approach when practical to enhance safety.

6.53.3. Precision Approaches. For a precision approach, the decision height will provide a height above touchdown of 200 ft or higher. For category (CAT) II ILS approaches, use the lowest published radar altitude. For PAR approaches, visibility will be no lower than RVR 2400 (730 meters) or 1/2 mile visibility (800 meters) without RVR readout available.

6.53.4. Circling Approach. Circling approach minimums will be as published for the applicable aircraft category. If not published by category, limit circling minimums to an MDA based on a height above airport (HAA) and visibility as indicated below or as published, whichever is higher.

6.53.4.1. Categories D: 600 feet HAA and 2-mile visibility.

6.53.4.2. C-22B and C-38A are category C aircraft except for circling approaches. For circling approaches they are category D.

6.53.5. Missed Approach. Prior to starting an instrument approach, pilots will confirm their aircraft can meet or exceed all climb gradients specified in the missed approach procedure, based on the number of engines operating when the approach is begun. If missed approach climb charts are not available, use the takeoff obstacle clearance chart. If unable to meet required climb gradients, pilots must coordinate alternate missed approach procedures with ATC that will ensure terrain clearance, prior to commencing the approach. If this is not possible, do not attempt the approach.

6.54. Weather Below Minimums.

6.54.1. Established on a Segment of the Approach. If established on a segment of the approach and the weather is reported or observed to be below approach minimums, the aircraft commander has the option of continuing the approach to the appropriate minimums. If deciding to abandon the approach comply with the appropriate missed approach procedures.

6.54.1.1. Do not continue the approach below minimums unless the aircraft is in a position to make a safe landing and the runway environment is in sight.

6.54.1.2. If the approach is continued, aircraft commanders should plan to have sufficient fuel available to complete the approach and missed approach and proceed to a suitable alternate with normal fuel reserve.

6.54.1.3. The aircraft commander has final responsibility for determining when the destination is below designated minimums and for initiating proper clearance request.

6.55. CAT II Procedures.

6.55.1. The following airfield and aircraft equipment must be operational:

6.55.1.1. Approach lights.

6.55.1.2. Runway centerline lighting.

6.55.1.3. High intensity runway lights or touchdown zone lights.

6.55.1.4. Approach end transmissometer.

6.55.1.5. ILS FAR Field Monitor.

6.55.1.6. Sequence flashers.

6.55.1.7. Cat II minimum RVR of 1200.

6.55.1.8. CAT II HAT of 100 feet minimum.

6.55.2. CAT II approaches will be discontinued if weather is reported below CAT II minimums.

6.56. Alternate Flight Publications.

6.56.1. The following publications are authorized if acceptable DOD FLIP products are not available:

6.56.1.1. United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA).

6.56.1.2. Jeppesen, Host Government Instrument Approaches or any product approved by the MAJCOM for which an operational requirement exists to include SIDS, STARS, etc.

6.56.2. Refer to AFI 11-202, Vol 3, *General Flight Rules* for approval and waiver information.

6.57. Operation of Airstairs/Lifting bed Vehicles.

6.57.1. When operating airstairs/lifting bed vehicles near the aircraft, ensure the aircraft doors ARE NOT OPENED until the vehicle is in position and all vehicle power is off.

6.57.2. A designated ground-spotter will visually confirm this procedure and signal the cockpit (or galley area as appropriate) that the door is "clear". The pilot in the left seat will remain in position until the signal is received.

6.57.3. Ensure that all entry doors are closed before reapplying power to any applicable servicing vehicle/airstair.

6.58. Maintenance.

6.58.1. Complete the AFTO Form 781 AFORM Aircrew/Mission Flight Data Document, after each flight.

6.58.2. After landing, crewmembers debrief maintenance personnel on the condition of the aircraft, engines, avionics equipment, and all installed special equipment as required.

6.59. Border Clearance.

6.59.1. The unit dispatching the mission is normally responsible for the border clearance of all aircraft.

6.59.2. When staff support is not available, border clearance is the responsibility of the aircraft commander. Duties may be assigned to ground personnel or to other designated crewmembers, but the aircraft commander retains ultimate responsibility. The aircraft commander is responsible for ensuring the following:

6.59.2.1. Crewmembers and passengers possess current passports and valid visas, when required.

6.59.2.2. Crewmembers and passengers have current certificates of immunization (shot record).

6.59.2.3. Cargo entry documents are in proper order.

6.59.2.4. Departing or entering the United States through an air base where border clearance can be obtained.

6.59.2.5. Obtaining border clearance for aircraft cargo, passengers, crew and baggage, if required, before takeoff to a foreign area or after arrival from a foreign area.

6.59.2.6. Spraying the aircraft (See Foreign Clearance Guide) and **Table 6.7.**

6.60. Procedures for US Entry.

6.60.1. En route, an FA or designated crewmember will distribute personal customs declarations to all passengers and crewmembers. An FA or designated crewmember will also brief passengers and crewmembers on customs regulations, and prepare and compile necessary border clearance forms for the aircraft commander's or designated representatives signature.

6.60.2. En route, notify the CC agency or airfield contact at the base of intended landing of any change in ETA to ensure that border clearance is accomplished as soon as possible after landing.

6.60.3. Obtain a permit to proceed when military necessities require that an aircraft (which has landed in the United States for customs clearance) proceed to another base in the US to obtain border clearance. The permit to proceed delays customs inspection of cargo, passengers, and crew until arrival at the off-load station and saves intermediate off-loading and reloading normally required for customs inspection. The permit to proceed is valid only to the airport of next landing where the border clearance must be completed or a new permit to proceed issued by a customs official. Do not make intermediate stops between the issue point of the permit to proceed and destination of manifested cargo unless required by an emergency situation or directed by the controlling C2 Center.

6.60.4. When an aircraft lands for a US border clearance, a US Customs representative normally will meet the aircraft to obtain the required documents. Do not deplane passengers or crewmembers unless necessary for safety or the preservation of life and property. Do not unload until approved by customs and agriculture personnel or their designated representatives. This procedure applies to the initial landing in the US and all landings required when operating on a permit to proceed or until all crew, passengers, and cargo complete final border clearance.

6.61. Inspections of US aircraft by foreign officials.

6.61.1. Follow US Air Force policy on status of military aircraft as stated in the Foreign Clearance Guide, *General Information* ***Chapter 3***. In substance, this policy holds that US military aircraft are immune from searches, seizures, and inspections (including customs and safety inspections) by foreign officials. In addition, aircraft commanders must be aware of and adhere to any specific Foreign Clearance Guide provisions for individual countries.

6.61.2. If confronted with a search request by foreign authorities, aircrews should use the following procedures:

6.61.2.1. In most cases, search attempts may be halted simply by a statement of the aircraft commander to the foreign official that the aircraft is a sovereign instrumentality not subject to search without consent of US Air Force headquarters or the US Department of State officials in the country concerned. This should be clearly conveyed in a polite manner so as not to offend foreign authorities that may honestly, but mistakenly, believe they have authority to search US Air Force aircraft.

6.61.2.2. If foreign authorities insist on conducting a search, the aircraft commander should make every effort to delay the search until he or she can contact U.S. Air Force headquarters, or the appropriate embassy officials. The aircraft commander should then notify these agencies of foreign request by the most expeditious means available and follow their instructions.

6.61.2.3. If foreign officials continue with a search, pending notification to officials, the aircraft commander should indicate that he or she would prefer to fly the aircraft elsewhere and request permission. Consider whether fuel, flying time, and mechanical considerations permit a safe flight.

6.61.2.4. If permission is refused, and the foreign authorities insist on forcing their way on board an aircraft, the aircraft commander should protest the course of action being pursued. State intentions to notify both US Air Force headquarters and the appropriate American embassy of the foreign action. The aircraft commander should not attempt physical resistance, and should thereafter report the incident to US Air Force headquarters and appropriate embassy as soon as possible. The aircraft commander should escort foreign authorities if the inspection cannot be avoided.

6.61.3. Other procedures may apply when carrying sensitive cargo or equipment. Follow these procedures and applicable portions of classified Foreign Clearance Guide supplements.

6.62. Insect and Pest Control.

6.62.1. Responsibility. Aircraft Commanders will ensure required spraying is accomplished according to AFI 48-104, Medical and Agricultural Foreign and Domestic Quarantine Regulations for Vessels, Aircraft, and Other Transports of the Armed Forces (Joint), Department of Defense Foreign Clearance Guide, or as directed by higher headquarters.

6.62.2. Certify the spraying on Customs Form 7507, or on forms provided by the country transited.

6.62.3. Aircraft should never be sprayed with passengers on-board. The only exception is when the Foreign Clearance Guide mandates it.

6.62.4. When spraying is required, use insecticide, aerosol d-phenothrin-2 percent, National Stock Number (NSN) 6840-01-067-6674 (or equivalent), to spray the aircraft. Use the following guidelines:

6.62.4.1. Direct the nozzle toward the ceiling of the compartment or space being sprayed.

6.62.4.2. Spray spaces inaccessible from within the aircraft after completely loading fuel, baggage, cargo, and passengers, including baggage compartments, wheel wells, and other similar spaces.

6.62.4.3. Spray the cabin, cockpit, and other spaces accessible from within the aircraft after the crew is aboard and after closing all doors, windows, hatches, and ventilation openings. CAUTION: If the insecticide label directs disembarkation after use, spray prior to boarding crew or passengers. Close all doors and hatches for 10 minutes after dispensing and ventilate for 15 minutes before allowing anyone on board.

6.62.4.4. Spray for 3 minutes and 20 seconds unless longer periods are specified for the country being transited. Keep used aerosol cans separate from other trash so they may be disposed of safely. Spray the aircraft for the times shown in

6.62.4.5. **Table 6.7.** unless longer periods are specified for the country being transited.

Table 6.7. Insect Spraying Times

MDS Aircraft	C-22B	C-38A
Spraying Time	40 Sec	15 Sec

6.62.5. Responsibility of Aircraft Commander in-flight. When seeing any insect or rodent infestation of the aircraft in-flight, notify the destination C2 CENTER, base operations, or airport manager of the situation before landing so the proper authorities can meet the aircraft.

6.62.6. Procedure at Aerial Port of Disembarkation (APOD). On arrival at an APOD, do not open cargo doors or hatches except to enplane required officials inspecting the aircraft for insect or rodent infestation or to deplane the minimum number of crewmembers required for block-in duties. Do not on-load or off-load cargo or passengers until the inspection is satisfactorily completed. This procedure may be altered to satisfy mission or local requirements, as arranged by the base air terminal manager or the local C2 organization.

Section 6H—Miscellaneous

6.63. Dropped Object Prevention.

6.63.1. If a dropped object is discovered, the flight crew will: notify the Mission Control Center and the air traffic control agency as soon as practical.

6.63.2. Include routing, altitude, weather, etc.

6.64. Cockpit Voice Recorder (CVR). If involved in a mishap or incident, after landing and terminating the emergency, open the CVR power circuit breaker.

6.65. Passenger Restrictions.

6.65.1. The only passengers on missions transporting DVs will be those of the official party and those space available passengers authorized by the on-board contact officer.

6.65.2. Space-available Passengers. On occasion, a space-available seat release may be authorized through HQ USAF/CVAM. This will be noted on the mission setup. Aircraft Commanders are authorized to release space available seats on non-revenue mission legs (except White House missions) when no official passengers are aboard (positioning and de-positioning legs). Aircraft Commanders are encouraged to release maximum space available seats subject to the following restrictions:

6.65.2.1. Revenue Missions. Space-available passengers on revenue missions must be approved in advance by USAF/CVAM through Current Operations. This is essential to assure proper funding and reimbursement.

6.65.2.2. NGB missions. Space-available seats will normally be released. Restrictions to space-available seating must be coordinated in advance through ANG validators.

6.65.2.3. JOSAC missions. Space available seats should be released on all JOSAC missions. Restrictions will be noted in JOSAC messages.

6.65.2.4. Billing. Space available passengers on Revenue missions without the approval of the applicable agency may be subject to being billed for commercial first-class airfare for the applicable route, depending on the using agency's policy. If the DV or on-board contact officer releases seats, advise them of this prior to boarding passengers. Attempt to obtain the proper approval.

6.65.2.5. Anti-hijacking Inspections. Board space-available passengers only after anti-hijacking inspections are completed. If a space-available seat release is anticipated at an en route station, the local passenger service facility will be advised of the inspection requirement. Procedures for anti-hijacking inspections by the aircrew at stations without a military passenger service facility are specified in **Chapter 12**. The Aircraft Commander has final authority for accepting space available passengers.

6.65.3. Passenger Boarding. On all missions operating without security guards, the first FA will ensure that all passengers are listed on the passenger manifest prior to boarding the aircraft. *(EXCEPTION*: The Copilot will be responsible for checking passengers on the C-38A). Passengers will be greeted and checked upon arrival to the aircraft. The AC or the mission escort officer must clear any passengers not listed on the manifest prior to entering the aircraft. This task will be completed at the beginning of each mission and any time passengers have to re-board the aircraft.

6.66. C-38A Operations at La Paz (J.F. Kennedy Intl) Bolivia (Elev. 13,355 feet).

6.66.1. Raise cabin altitude to 10,000 feet during the descent. Configure aircraft pressurization, air conditioning, and oxygen/warning systems as required and complete the remaining depressurization on final approach.

6.66.2. A specific timed period of oxygen use prior to landing is not required. Aircrew members use oxygen during descent, approach, landing, takeoff, and ground operations when engines are running/ checklist operations in progress.

6.66.3. Aircraft Commander briefings and PAX briefings must include cautions on high altitude operations and hypoxia. All passengers are susceptible to hypoxia during depressurized flight above 10,000 feet cabin altitude. Administer oxygen to any passenger displaying hypoxia symptoms. DO NOT land pressurized.

6.66.4. Take your time during ground operations at high altitude. Monitor and back up other crewmembers servicing or loading the aircraft. Keep portable oxygen bottles readily available in the event of over-exertion or hypoxia.

6.66.5. Review flight manual for specific procedures.

6.67. No-Show Passenger Baggage. No-show passenger baggage or baggage of passengers removed from flight will be downloaded prior to departure.

6.68. Airfield Data Reports.

6.68.1. Aircrews transiting strange airfields or airfields will report conditions which may adversely affect subsequent flights.

6.68.2. Report airfield characteristics that produce illusions, such as runway length, width, slope, and lighting, as compared to standard runways, sloping approach terrain, runway contrast against surrounding terrain, haze, glare, etc.

6.68.3. Debrief the next C2 CENTER transited.

6.69. Impoundment of Aircraft. If an aircraft is involved in a serious in-flight incident, the Aircraft Commander should contact the controlling C2 CENTER and Mission Control Center for further instructions.

Chapter 7

AIRCRAFT SECURITY

7.1. General.

7.1.1. Your mission places you and your aircraft in an environment highly vulnerable to security threats. The importance of the DVs transported and the high frequency of missions into civil airports throughout the world magnifies this vulnerability. Positive security measures are required at all times.

7.1.2. This chapter provides guidance on aircraft security and preventing and resisting aircraft piracy (hijacking) of 201 AS aircraft. AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking)*, AFI 31-101, Vol. 1, *Air Force Physical Security Program*, and specific MAJCOM security publications contain additional guidance.

7.1.3. Aircrews will not release information concerning hijacking attempts or identify armed aircrew members or missions to the public.

7.2. Security.

7.2.1. Comply with volumes of AFI 31-101 for protection requirements.

7.2.2. All 201 AS aircraft will be designated priority C resources.

7.3. Air Force Physical Security Program.

7.3.1. Aircraft Commander Authority. The Aircraft Commander will ensure that adequate aircraft security is provided at all times.

7.3.2. Advance Security Support Arrangements. The Aircraft Commander will coordinate security support at en route stations in advance to ensure its availability. TACC will assist the Aircraft Commander for alert missions or en route diversions.

7.3.3. Briefings. When required, Aircraft Commanders will obtain threat assessment and security capability evaluation briefings before departing home station. TACC will provide the Aircraft Commander with pertinent updates en route.

7.3.4. Baggage Security. Baggage not certified safe for loading by a responsible government agency will be inspected prior to loading at the Aircraft Commander's discretion. Verify baggage identification against passenger manifest. Aircrew members will secure their own baggage.

7.4. En Route Security.

7.4.1. Aircraft Access Control. Positive control of access to aircraft is mandatory.

7.4.1.1. When ASNCOs accompany aircraft, ASNCOs control access. They will positively identify all individuals granted unescorted entry to the aircraft.

7.4.1.2. When ASNCOs do not accompany 201 AS aircraft, the aircrew is responsible for controlling access. Monitor all servicing and support personnel. Do not allow unidentified personnel onboard or around the aircraft. Escort unofficial visitors on board the aircraft and keep them under surveillance until they depart.

7.4.2. Use of Aircraft locks. Except for aircraft protected by an aircrew ASNCO, aircraft will be locked during all overseas RONs and during any ground time when the aircrew is absent from the aircraft.

7.4.3. Refer to **Chapter 13** of this AFI for specific ASNCO procedures.

7.4.4. When used, the PHOENIX RAVEN team will consist of two US Air Force security force members, but may include more depending on security requirements. The team travels special passenger status and is responsible to the Aircraft Commander at all times. In turn, Aircraft Commanders are responsible for their welfare (transportation, lodging, etc.). Aircraft Commanders will ensure security team members receive a mission briefing, aircraft egress/passenger briefing as appropriate.

7.5. Detecting Unauthorized Entry.

7.5.1. Security awareness is crucial to effective mission accomplishment. Aircrews must always remain vigilant to their surroundings, especially at high threat, low security locations.

7.5.2. During preflight activities, aircrews will inspect all accessible areas, to include aircraft wheel wells, and all cargo compartments of the aircraft for unauthorized packages, personnel, or other unfamiliar devices. Report any suspicious items to host security forces. Aircrews will maintain a heightened security posture throughout all pre-takeoff activities.

7.5.3. If the Aircraft Commander suspects aircraft has been tampered with or subjected to unauthorized entry, take the following actions:

7.5.3.1. Notify the local security authorities and request a thorough inspection of the aircraft for sabotage, explosive devices, and pilferage.

7.5.3.2. Notify Mission Coordination Center. Advise of any requirements for assistance, and give an estimate of a revised departure time.

7.5.3.3. If there are indications that sabotage is a definite possibility or if security inspections may delay the DV party, notify the mission contact officer. Establish suitable departure time. If necessary, coordinate suitable alternate transportation through controlling agency.

7.5.3.4. Monitor the security check of the aircraft. When cleared by security authorities, conduct thorough preflight inspection. Look for broken wiring, damaged components, foreign devices, etc.

7.5.3.5. When practical, notify the Andrews AFB Intelligence office. They will be able to alert other aircrews of the event and provide follow up actions.

7.6. Preventing and Resisting Hijacking.

7.6.1. General Hijacking Guidance. A hijacking could create a serious international incident and jeopardize the safety of passengers and crew. High level DVs traveling aboard 201 AS aircraft increase potential severity of any hijacking incident. You can expect the National Military Command Center (NMCC) to become involved in resolving hijack crises.

7.6.2. Andrews Command Post is central point of contact if a hijacking threatens your aircraft at any location. When possible, maintain constant contact with Andrews Command Post to take advantage of their resources.

7.6.3. The Aircraft Commander is the coordinating authority for anti-hijacking procedures. The Aircraft Commander has first-hand knowledge of the situation and must take every opportunity to keep command authorities apprised of the situation.

7.6.4. The Air Transportation Act of 1974 and the Federal Aviation Act of 1958, as amended, vest the FAA Administrator with exclusive responsibility for the direction of law enforcement activity in aircraft hijacking situations involving all aircraft (civil and military) in-flight in the United States.

7.6.5. In taking action during an aircraft hijacking situation, military forces will act under military command within the scope of their duties.

7.6.6. In the event an aircraft involved in an aircraft hijacking situation is carrying documents, equipment, or material that DOD has determined to be highly sensitive, or weapons of mass destruction, DOD will provide FAA, and where appropriate, the FBI, with all pertinent information. Where possible, the FAA will consult and cooperate with DOD prior to directing any law enforcement activity.

7.6.7. An aircraft is most vulnerable to hijacking when the aircrew is aboard and the aircraft is operationally ready for flight.

7.6.8. A concerted effort must be made to prevent the hijacking of military or military contract aircraft by detecting potential hijackers before they board the aircraft.

7.6.9. Should preventive efforts fail, any actual attempt to hijack a military aircraft must be resisted in a manner appropriate to the situation. Resistance may vary from dissuasion to direct confrontation, including the use of weapons. ASNCOs are authorized to use weapons to subdue a hijacker.

7.6.10. Since air piracy may be committed by political terrorists or by individuals to whom the threat of death is not a deterrent but a stimulus, ordinary law enforcement procedures may be ineffective. Thus, successful conclusion of a hijacking situation and apprehension of the hijackers may require use of specialized law enforcement techniques and procedures.

7.6.11. Delaying actions have been most successful in overcoming hijackings without loss of life or property.

7.6.12. In the case of an aircraft carrying passengers, the primary concern is the safety of the passengers.

7.6.13. Assistance to hijacked civil or military contract aircraft will be rendered as requested by the pilot in command of the aircraft and the authority exercising operational control of the anti-hijacking effort.

7.7. Preventive Measures.

7.7.1. Commanders at all levels must ensure preventive measures are taken to minimize access to the aircraft by potential hijackers. When an aircraft is operating away from home station, the Aircraft Commander will ensure provisions of this chapter and AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking)*, are complied with.

7.7.2. Preventive measures include the following: The host station passenger processing or manifesting facility should conduct anti-hijacking inspections. Do not board passengers until the Aircraft Commander is fully satisfied with inspection results. In the absence of qualified passenger service representatives, the Aircraft Commander will ensure the anti-hijacking inspection of passengers and baggage is accomplished.

7.7.3. Medical facility commanders are responsible for anti-hijacking inspection of patients. When patients are delivered to the aircraft by civilian sources, the aircrew will perform required inspections prior to loading.

7.7.4. During exercises or contingencies in support of combat operations involving the movement of large groups of personnel, the unit being supported should manifest passengers and perform anti-hijacking inspections.

7.7.5. Passengers will not carry weapons or ammunition on their person or in hand-carried baggage aboard an aircraft except special agents, guards of the Secret Service or State Department, and other individuals specifically authorized to carry weapons.

7.7.6. If weapons must be cleared, ask the individual to:

7.7.6.1. Move to a safe, clear area at least 50 feet from any aircraft, equipment, or personnel before unholstering or unslinging their weapons.

7.7.6.2. Clear weapons in accordance with standard safety procedures.

7.8. Initial Response.

7.8.1. When an act of air piracy involves an Air Force installation or aircraft within the United States, response will be according to the following guidelines until such time as FAA assumes active direction of anti-hijacking efforts. Resist all attempts to hijack a military aircraft. Resistance may vary from simple discussion through deception and subterfuge, to direct physical confrontation, including the prudent use of weapons.

7.8.2. To counter a hijacking, actual or threatened, delay movement of the aircraft to provide time for ground personnel and the aircrew to establish communication and execute coordinated resistance actions.

7.9. In-Flight Resistance.

7.9.1. After airborne, success in thwarting a hijacking depends on the resourcefulness of the aircrew. Many variables of a hijacking preclude use of any specific counter-hijacking procedure. Some key factors should be evaluated before deciding a course of action to be taken, including the nature of the threat, danger to life or crippling damage to the aircraft in-flight, destination indicated by the hijacker, and the presence of sensitive material onboard.

7.9.2. Some counter-hijacking actions the aircrew may consider are:

7.9.2.1. Engage the hijackers in conversation to calm him or her and to evaluate what course of action might be effective.

7.9.2.2. Dissuade the hijacker.

7.9.2.3. Use facts or subterfuge to convince the hijacker intermediate stops are necessary.

7.9.2.4. Propose more favorable alternatives, such as landing in a neutral, rather than a hostile, country.

7.9.2.5. Exploit any reasonable opportunity to incapacitate or overcome the hijacker physically, including the prudent use of firearms.

7.10. Communications Between Aircrew and Ground Agencies.

7.10.1. Crews facing a hijacking threat will notify ground agencies by any means available as soon as practical and follow-up with situation reports as circumstances permit.

7.10.2. If possible, transmit an in-the-clear notification of hijacking to ATC. Controllers will assign IFF code 7500 (does not preclude subsequent selection of code 7700).

7.10.3. If in-the-clear transmissions are not possible, report "am being hijacked" by setting transponder to code 7500. If unable to change transponder code, or when not under radar control, transmit a radio message to include the phrase "(call sign) transponder seven five zero zero."

7.10.4. Controllers will acknowledge receipt and understanding of transponder code 7500 by transmitting "(call sign) (facility name) verify squawking 7500." An affirmative reply or lack of reply from the pilot indicates confirmation and proper authorities are notified.

7.10.5. To report "situation appears desperate; want armed intervention," after code 7500 is used, change to code 7700. If unable to change transponder code to 7700, or when not under radar control, transmit "(aircraft call sign) transponder seven-seven-zero-zero."

7.10.5.1. When changing from code 7500 to code 7700, remain on 7500 for at least 3 minutes or until a confirmation of code 7500 is received from ATC, whichever is sooner, before changing to code 7700. ATC acknowledges code 7700 by transmitting "(call sign) (facility name) now reading you on transponder seven-seven-zero-zero."

7.10.5.2. Aircraft squawking 7700 after squawking 7500, which are not in radio contact with ATC, are considered by ATC to have an in-flight emergency (in addition to hijacking), and the appropriate emergency procedures are followed. Notification of authorities in this case includes information that the aircraft displayed the hijack code as well as the emergency code.

7.10.6. To report "Situation still desperate, want armed intervention and aircraft immobilized", leave flaps and slats full down after landing, or lower full flaps while on the ground. To facilitate message distribution, transmit "(aircraft call sign) flaps are full down."

7.10.7. To report "Leave alone, do not intervene," retract the flaps/slats after landing. Pilots who retract flaps and slats after squawking 7700 should return to code 7500 and remain on code 7500 for the next leg of the hijacked flight unless the situation changes. Transmit "(call sign) back on seven five zero zero" to emphasize the fact intervention is no longer desired.

7.11. Forced Penetration of Unfriendly Airspace.

7.11.1. These procedures are designed to deter possible hostile action against the hijacked aircraft that has been forced to penetrate airspace of a nation unfriendly to the United States.

7.11.2. If instructions from the unfriendly nation are received either by radio contact or by air intercept before boundary crossing, comply with instructions received.

7.11.3. If no contact with unfriendly nation is made before approaching a boundary:

7.11.3.1. Maintain TAS not more than 400 knots.

7.11.3.2. Maintain an altitude between 10,000 and 25,000 feet if possible.

7.11.3.3. Fly a direct course toward destination announced by the hijacker, if no course is specified.

7.11.3.4. Transmit the international distress signal, MAYDAY, on any of the international distress frequencies (121.5 MHz, 243.0 MHz, or 2182 KHz) in an effort to establish communications.

7.11.3.5. Set mode 3 code 7700 on transponder.

7.11.3.6. If radio contact cannot be established, follow procedures set forth in FLIP.

7.11.4. Consider the presence of classified documents and equipment aboard the aircraft. When a landing in an unfriendly nation is imminent, attempt to dispose of or destroy the equipment or material.

7.12. Force Protection. Crews must be alert to the possibility of terrorist activities at all times. Certain considerations may help crewmembers avoid becoming victims of terrorism when operating in overseas locations**.**

7.12.1. Personal Conduct. Crews must realize their conduct can make them a target for individuals dissatisfied with US foreign involvement in their national affairs. Local foreign nationals may or may not condone a military presence - crew conduct will be watched and judged. Therefore, utilize the following:

7.12.1.1. Maintain good military bearing both on and off duty.

7.12.1.2. Avoid dressing in clothes that highlight the fact you are an American, i.e. cowboy hats, wide belt buckles, shirts with pro-American slogans, etc.

7.12.1.3. Do not wear clothing displaying profanity.

7.12.1.4. Know where “off limits” areas are and avoid them.

7.12.1.5. When possible, always travel in groups of two or more.

7.12.1.6. Avoid demonstrations for any cause.

7.12.1.7. Avoid discussion of politics.

7.12.2. Ground transportation security. When traveling to and from billeting, messing facilities, etc. consider the following to minimize drawing attention to yourself as a potential target:

7.12.2.1. If possible, consider not using a car that announces Government ownership.

7.12.2.2. Park in well-lighted areas.

7.12.2.3. Always lock your car. If possible, do not leave it on the street overnight.

7.12.2.4. Avoid isolated roads and dark alleys.

7.12.3. Personal Identification. Consider the following actions to avoid advertising the fact you are an American:

7.12.3.1. Avoid military style luggage such as B-4 bags and duffel bags with military logos, etc.

7.12.3.2. Consider placing your official passport and related documents such as military ID, flight orders, dog tags in your hand-carried luggage and not in your wallet or purse.

7.12.3.3. Wear conservative styled civilian clothing when using commercial transportation.

7.12.4. Hotel Security. When billeted in commercial hotels, crews need to be aware of the following:

7.12.4.1. If possible, obtain rooms between the second and sixth floors.

7.12.4.2. Always lock interior locks when occupying rooms.

7.12.4.3. Always assume your room is monitored and avoid viewing or discussing classified material.

7.13. Protecting Classified Material on Aircraft.

7.13.1. The Aircraft Commander is responsible for protection of classified materials aboard their aircraft. See requirements in AFI 31-401, *Information Security Program Management.*

7.13.2. As a minimum, ensure the IFF equipment is set to zero before leaving the aircraft.

Chapter 8

OPERATIONAL REPORTS AND FORMS

8.1. General. Applicable reports and forms are contained in this chapter.

8.2. AF Form 457, USAF Hazard Report (*AFI 91-202, The US Air Force Mishap Prevention Program)*

8.2.1. The Air Force hazard reporting system provides a means for Air Force personnel to alert supervisors and commanders to hazardous conditions requiring prompt corrective action.

8.2.2. Special Procedures for Hazard Reports Concerning Weather. Complete the front of an AF Form 457 and address it to the parent wing flying safety office. If a computer flight plan deficiency is involved, attach one copy of the AF Form 72, Air Report (AIREP), flight itinerary, and the computer flight plan (CFP) to the report. Send the report so that the parent unit receives it within 5 days.

8.3. AF Form 651, Hazardous Air Traffic Report (HATR), (AFI 91-202).

8.3.1. The Air Force HATR program provides a means for personnel to report all near midair collisions and alleged hazardous air traffic conditions. Use the following procedures:

8.3.1.1. Make an airborne report of the hazardous condition to the nearest air traffic control agency (e.g. center, FSS, control tower, or aeronautical radio station), and give the following information as appropriate: (FAA must know if an official report is being filed).

8.3.1.1.1. Call sign

8.3.1.1.2. Time and place (radial/DME of NAVAID, position relative to the airfield, etc.) of the occurrence

8.3.1.1.3. Altitude or flight level

8.3.1.1.4. Description of the other aircraft

8.3.1.1.5. Statement that a written HATR report will be filed upon landing

8.3.1.2. File the HATR as soon as possible (within 24 hours) using any available means of communication. Normally, it should be filed at the Air Force base operations office at the landing airport. If this is impractical and if communications permit, notify the safety office of the Air Force base where the condition occurred, the safety office at the home base, or as prescribed by the overseas major command. In any case, provide the base or wing safety office with all available information needed to prepare AF Form 651. Turn in a completed copy of AF Form 651 to the squadron safety office.

8.3.2. Individuals who submit HATRs on incidents are granted immunity from disciplinary action provided:

8.3.2.1. Violation was inadvertent, i.e. not deliberate.

8.3.2.2. No mishap occurred.

8.3.2.3. No criminal offense was intended or committed.

8.3.2.4. The individual reported the incident according to paragraph **8.3.**

8.4. MAJCOM-Approved Form, USAF Aircraft Mishap Report Worksheet (Aircraft and Personnel Mishaps).

8.4.1. Responsibilities. Notify the appropriate authorities of any mishap involving aircraft or crew. Reportable Mishaps. Report damage to the aircraft or injury to the crew or passengers. Also, any damage or injury to another organization's equipment or personnel resulting from the movements or actions of an aircraft or crew.

8.4.2. Reportable mishaps include:

8.4.2.1. Physiological mishaps.

8.4.2.2. Engine flameout, failure, or required shutdowns after engine start with intent for flight, regardless of damage. Report incidents involving two or more engines immediately. Single-engine incidents may be reported upon landing. *NOTE:* Intentional shutdowns for training, FCF, or other non-emergency purposes are excluded; however, report failure to restart, using the criteria above.

8.4.2.3. Loss of thrust sufficient to preclude maintaining level flight at a safe altitude.

8.4.2.4. Engine case penetration by shrapnel from internal engine component failure.

8.4.2.5. Engine case rupture or burn-through, engine bay fire, or massive fuel leakage.

8.4.2.6. Inadvertent thrust reversal.

8.4.2.7. Flight control malfunction (including AFCS and trim systems) resulting in an unexpected, hazardous change of flight attitude, altitude, or heading. When making the AFTO 781A, entry, include the flag words "reportable flight control malfunction."

8.4.2.8. Malfunction of landing gear when difficulty is experienced using emergency system or procedures.

8.4.2.9. Cargo door or ramp malfunction when intent for flight exists, which could affect the integrity of the system.

8.4.2.10. In-flight loss of all pitot-static instrument indications or all gyro-stabilized attitude or directional indications.

8.4.2.11. Spillage or leakage of radioactive, toxic, corrosive, or flammable material from aircraft stores or cargo that, in the judgment of the reporting individual, is significant hazard to the crew, passengers, or aircraft.

8.4.2.12. Human factors related situation. These include: misinterpretation of instruments, crew overload, (inputs to the crew at a rate too fast to permit reasonable decisions based on the data received; or too many actions required in too short a period of time), or confusion of controls such as would be caused by adjacent switches where the actuation of the wrong switch could create a dangerous situation. Anonymous reports of such situations are acceptable.

8.4.2.13. All cases of departure from intended takeoff or landing surface onto a surface not designed to normally support takeoff or landing loads.

8.4.2.14. All in-flight fires regardless of damage.

8.4.2.15. All bird strikes regardless of damage.

8.4.2.16. Any occurrence which does not meet the established criteria for a reportable mishap but, in the judgment of the reporting individual, needs to be emphasized in the interest of safety.

8.4.3. Procedures. Report mishaps as soon as possible to the following offices using the following precedence:

8.4.3.1. MAJCOM flying safety officer (FSO).

8.4.3.2. Any FSO.

8.4.3.3. Nearest C2 Center.

8.4.3.4. Base operations.

8.4.3.5. In all cases, retain a copy of all relevant information, and turn it into a home station safety officer.

8.4.4. Required Information. Complete all appropriate areas of the form. Provide as much detail as possible.

8.5. Reports of Violations.

8.5.1. Violations identified in AFI 11-202, Volume 3, *General Flight Rules*, alleged navigation errors (including over-water position errors exceeding 24 NM, border and air traffic control violations) will be reported.

8.5.2. Use the following format and include:

8.5.2.1. Factual circumstances.

8.5.2.2. Investigation and analysis.

8.5.2.3. Findings and conclusions.

8.5.2.4. Recommendations.

8.5.2.5. Actions taken.

8.5.3. Attachments to include:

8.5.3.1. Notification of incident.

8.5.3.2. Crew orders.

8.5.3.3. Statement of crewmembers (if applicable).

8.5.3.4. Documenting evidence (logs, charts, etc.).

8.5.4. In addition to the information listed, the historical flight plan will be downloaded onto a floppy disk and turned into the command and control facility or owning standardization and evaluation office.

8.5.5. Send the original investigation report within 45 days to the ANG/DO.

8.5.6. The following OPREP-3 reporting procedures for all aircraft notified of navigational errors exceeding 24 NM will be reported under AFMAN 10-206, *Operational Reporting.*

8.5.6.1. On notification of a navigational position error, the aircraft commander (or agency receiving notification) documents the circumstances surrounding the incident (report content below) and ensures submission of an OPREP-3 report through C2 CENTER channels.

8.5.6.2. Report content:

8.5.6.2.1. Name and location of unit submitting report

8.5.6.2.2. Mission identification number

8.5.6.2.3. Reference to related OPREPs-3

8.5.6.2.4. Type of event. (State "Navigation position error.")

8.5.6.2.5. Date, time (Zulu), and location (i.e. ARTCC area)

8.5.6.2.6. Description of facts and circumstances. Include aircraft type and tail number, unit (wing or squadron assignment of crew), home base, route of flight, point of alleged deviation, and miles off course.

8.6. Petroleum, Oil, and Lubricants (POL)Aviation Fuels Documentation.

8.6.1. This section describes procedures for the aviation fuel program (AVPOL) for all USAF aircraft. Procedures are established for correct documentation, processing of forms and invoices, program oversight, and personnel responsibilities. Reference AFI 23-202, *Buying Petroleum Products, and Other Supplies and Services Off-Station*, AMC decentralization procedures, and AFMAN 23-110, Vol. 3, Part 1, *Miscellaneous Material*.

8.6.2. Responsibilities. All aircrew and maintenance personnel will be familiar with the procedures and documentation requirements of this chapter. Purchase of aviation fuel not complying with this instruction may become the financial responsibility of the purchaser.

8.6.3. Aircraft will be refueled or de-fueled at DOD locations unless DOD-owned fuel is not available; in which case, fuel may be procured from other sources using the following priority.

8.6.3.1. Defense Fuel Supply Center (DFSC) or Canadian into-plane contracts

8.6.3.2. Foreign government air forces

8.6.3.3. Open market purchase to include Shell International Trading Company (SITCO) agreement

8.6.4. DOD FLIP en route supplements identify locations with into-plane contracts.

8.6.5. AVPOL Documentation Use and Procedures.

8.6.5.1. AF Form 664, Aircraft Fuels Documentation LogUsed to log and store all AVPOL transaction documentation. Log <u>all</u> off station transactions on front of AF Form 664 then insert the supporting documentation inside the envelope. Turn in AF Form 664, with supporting documentation, at maintenance debriefing.

8.6.5.2. AF Form 315, United States Air Force Avfuels InvoiceUsed to purchase aviation fuel at non-DOD activities. See AFI 23-202, *Buying Petroleum and Other Supplies and Services Off-Station*. When completed, log and place inside the AF Form 664.

8.6.5.3. AF Form 15, United States Air Force InvoiceUsed to purchase services at non-DOD activities. See AFI 23-202. When completed, log and place inside AF Form 664.

8.6.5.3.1. If the vendor wants to be paid payment without submitting an invoice, the aircraft commander retains the original AF Form 315 to return to home station for accounting and finance processing. Provide two legible copies of the form to the vendor. If the vendor wants to submit an invoice for payment, give the vendor the original AF Form 315 to attach to the invoice.

8.6.5.3.2. Purchases at Canadian into-plane locations will be documented using the local vendor's invoice. AF Form 15 or 315 will not be accomplished. Hand scribe the information from the aircraft identaplate to the vendor's invoice, and complete a separate sheet with the information listed on the Aviation Issues to DOD and Non-DOD, Aircraft Refueling Tender Sheet. See AFI 23-202. Log and place a copy inside the AF Form 664.

8.6.5.3.3. Purchases at SITCO Agreement locations require presenting the aircraft identaplate. The invoice must include the date of transaction, grade of the product, quantity issued or de-fueled, unit of measure, and signature of the Air Force representative. If the vendor also requires completion of an AF Form 15 or 315 in addition to their invoice, annotate on the vendor's invoice "AF FORMS EXECUTED." Log and place the documentation inside the AF Form 664.

8.6.5.3.4. Purchases at non-contract commercial airfields are accomplished using the AF Form 15 or 315. Refer to AFI 23-202, and figures 4, 5, and 6 for guidelines on completing these forms.

8.6.5.3.5. Purchases at foreign military airfields, including replacement-in-kind (RIK) locations, the host country forms are used to record the purchase. Information from the aircraft identaplate should be hand scribed on the local form. Log and place a copy inside the AF Form 664.

8.6.6. AF Form 1994, **Fuel Issue/Defuel Document** Used for purchases at all US Air Force locations using a valid DD Form 1896, Jet Fuel Identaplate. Log and place inside AF Form 664.

8.6.7. AFTO Form 781H, **Aerospace Vehicle Flight Report and Maintenance Document**. Complete form per applicable technical directives. When removed from jacket, turn in to maintenance. Maintenance will retain for 90 days after inter-fund billing to provide a secondary audit trail for fuels issue and flying hours.

8.6.8. DD Form 1896, Jet Fuel Identaplate, aircraft fuel and oil charge card.

8.6.9. DD Form 1898, Av Fuels Into Plane Sale Slip, fuel transaction receipt is used for purchases at other DoD locations, including DFSC into-plane contract locations. Log and place inside AF Form 664. (If the contractor insists on completing their own invoice in addition to the DD Form 1898, the invoice must be annotated "DUPLICATE DD FORM 1898 ACCOMPLISHED.")

8.7. AF Form 2282, Statement of Adverse Effect - Use of Government Facilities.

8.7.1. This form shows that use of Government quarters and/or mess or officers/enlisted open mess would have been detrimental to the mission.

8.7.2. Submit with travel voucher. Failure to complete this form when it is applicable will result in reduced per diem.

8.8. AMC Form 54, Aircraft Commander's Report on Services/Facilities.

8.8.1. This is an instrument for aircrews to report that services rendered or conditions encountered were unsatisfactory or detrimental to efficient air mobility operations; services rendered or procedures used are worthy of adoption for all MAJCOM organizations; or a performance rendered by a person (or persons) was commendable and deserves recognition.

8.8.2. Attempt to solve problems by contacting appropriate supervisors including the senior commander if conditions and situation warrant. If further action is deemed necessary or the problem requires increased visibility, submit this form.

8.8.3. Submit the form to originators squadron commander. Time permitting, leave an information copy with the Command post or senior AMC representative on-station. The originators squadron will forward an information copy to HQ ANC/DOV fax: 576-5692 and AMC NAF/DO (21 AF/DO fax: 440-2356 and 15 AF/DO fax: 837-0353) then process the Form 54 as outlined in AMCI 11-208.

8.9. AMC Form 43, AMC Transient Aircrew Facilities Report (RCS: AMC-DOV (AR) 94402).

8.9.1. Any crewmember may submit this form. The report may be submitted whether or not an unsatisfactory item is included in the aircraft commander's trip report.

8.9.2. Complete AMC Form 43 and send to HQ AMC/MWPS. This report is designated emergency status code C2; continue reporting during emergency conditions, normal precedence.

8.9.3. Submit data requirements in this category as prescribed or as soon as possible after submission of priority reports. Continue electronic reporting during MINIMIZE.

8.10. AMC Form 196, Aircraft Commander's Report on Crewmember.

8.10.1. The Aircraft Commander will prepare an AMC Form 196 on each crewmember whose performance was outstanding, below average, or unsatisfactory during a mission.

8.10.2. Send the report to the commander of the unit to which the crewmember is assigned or attached for flying. Form should fully explain outstanding, below average, and unsatisfactory performance.

8.11. MAJCOM Approved MIJI (Meaconing, Intrusion, Jamming, Interference) Incident Report Worksheet.

8.11.1. Purpose. The MIJI reporting system is a program to identify, analyze, and disseminate information concerning MIJI incidents.

8.11.2. Procedures. Comply with Air Force headquarters direction by reporting all incidents through the OPREP (operations reporting) system. Complete the MIJI Incident Report Worksheet, and turn in to base operations upon landing.

Chapter 9

TRAINING POLICY

9.1. Qualification Training.

9.1.1. Initial qualification, re-qualification, or upgrade training for pilots will not be conducted on missions with passengers onboard. Mission qualification training may be conducted on missions with passengers onboard if the individual in training is qualified (completed aircraft check-ride with a valid AF Form 8, Certificate of Aircrew Qualification).

9.1.2. The Instructor and/or Flight Examiner makes the final determination to fly or cancel a training mission in the event that maintenance problems cause unacceptable delays and/or when weather is not suitable for the type training or evaluation to be accomplished.

9.1.3. If weather or maintenance delays are encountered, the Aircraft Commander will coordinate a new takeoff time or mission cancellation with Mission Coordination Center and notify base operations if a flight plan has been filed.

9.1.4. Civilian employees under direct contract to the DOD, engaged in official direct mission support activities, are considered mission essential and may be onboard when touch-and-go landings are performed.

9.1.5. Requirement for Instructor and Flight Examiner. Conduct simulated emergencies only during training and evaluation or currency flights when an Instructor or Flight Examiner pilot is occupying one of the pilot seats. Instructor pilot candidates who occupy a pilot seat and are under direct supervision of a Flight Examiner pilot, not in a pilot seat, may conduct simulated emergencies during initial and re-qualification upgrade evaluations to Instructor pilot. Touch-and-go landings with passengers are prohibited.

9.2. Simulated Emergency Flight Procedures.

9.2.1. Simulated emergency procedures other than engine-out approaches and landings will be limited to non-critical phases of flight and will be kept to a minimum when IMC or at night. Use a realistic training/evaluation approach and do not compound emergencies.

9.2.2. The minimum weather for engine-out approaches/landings is 1500/3, during the day and 3000/5 at night. This also applies for no-flap approaches in the C-38A. C-38A must also remain clear of clouds.

9.2.3. Simulated engine failures. Simulated engine failures are not authorized during circling approaches, at less than the engine-out minimum control speeds (as published in the applicable flight manual), when any actual emergency exists, or during no-flap landings.

9.3. Touch-and-Go Landing Limitations.

9.3.1. Practice touch-and-go landings only on designated training, evaluation, and currency missions.

9.3.2. Touch-and-go landings. May be performed by:

9.3.2.1. Instructor pilots, Instructor pilot candidates on initial or re-qualification Instructor evaluations, and Flight Examiner pilots from either seat.

9.3.2.2. Any pilot, from either seat provided that an Instructor pilot, Instructor pilot candidate on initial or re-qualification Instructor evaluation, or Flight Examiner pilot is in the other seat.

9.3.3. Wind and runway restrictions. Comply with wind restrictions, RCR and crosswind limits, and runway requirements in **Chapter 5** of this AFI. Do not exceed the normal or recommended zone of flight manual takeoff and landing crosswind component charts.

9.3.4. Weather. The minimum reported weather required to perform touch-and-go landings is 300 foot ceiling and RVR 40 (3/4-mile visibility without RVR).

9.3.5. Passengers. Do not perform touch-and-go landings when passengers are aboard.

9.3.6. Reverse thrust. Do not place the throttles in reverse or below flight idle during a touch-and-go landing. If the throttles are inadvertently taken into reverse thrust, reject the takeoff.

9.3.7. Jumbo jets. Do not perform touch-and-go landings when jumbo jets or the C-32 are operating in the VFR pattern. Apply appropriate spacing to provide adequate wake turbulence avoidance.

9.3.8. Stop-and-go-landings. Stop-and-go-landings should be used sparingly to avoid excessive brake energy build-up.

9.3.9. Minimum Runway for Touch and Go Landings. The minimum runway for touch and go landings is 7000 feet for the C-22B and 6000 feet for the C-38A or as required by performance data, whichever is higher.

9.4. Fuel Planning.

9.4.1. Planning Factors for Local Flights. Planning factors for local flights, including standard ramp fuel loads, planned flight training times, planned ground times between locals, and planned minimum landing fuel requirements are listed in **Chapter 6** of this AFI. Local training flights may be scheduled for more or less flying time with the proper coordination.

9.4.2. Instructor and Examiner Aircraft Commanders will initiate an approach to a full-stop landing when fuel on board is equal to or less than the amount specified in **Chapter 6** as the minimum fuel for landing. Request priority handling from air traffic control if necessary.

9.5. Category II ILS Approaches (C-38A).

9.5.1. Category II ILS Training. Flight and evaluation may be conducted at any ILS facility where signal output is accurate and stable enough to achieve the desired training. The following are weather, runway and minimums requirements:

9.5.2. Actual weather. No lower than 200-foot ceiling and 1/2-mile visibility (RVR 24), day or night.

9.5.3. Maximum crosswind component. 10 knots.

9.5.4. No published decision height (DH). When a Category II DH is not published, DH will be based on HAT of 100 feet.

9.6. Operating Limitations.

9.6.1. Policy: Unless specifically authorized elsewhere in this section, do not practice emergency procedures that degrade aircraft performance or flight control capabilities in-flight.

9.6.2. In an actual emergency, terminate all training and flight maneuvers practice. Training should be resumed only when the pilot in command determines it is safe to do so.

9.6.3. Practice simulated emergencies during training or evaluation or currency flights when an instructor or flight examiner pilot is occupying one of the pilot seats. Instructor pilot candidates who are under the supervision of a flight examiner pilot not in a pilot seat may practice simulated emergency procedures during initial or re-qualification instructor pilot upgrade evaluations.

9.6.4. Training Maneuver Restrictions. Training maneuver restrictions and minimum altitudes are shown in **Table 9.1.**

Table 9.1. Training Maneuver Restrictions and Minimum Altitudes

MANUEVER	Altitude Restriction	Other Restrictions
Actual Engine Shutdown	5,000 ft. AGL (min)	Do not practice actual engine shutdown when the purpose of this maneuver can be realized by a reduction of power. Under no circumstance will an engine be shut down for engine-out landing/missed approach training.
Any Simulated Emergency:	1.Initiate at or above V2 2.Initiate above 500 ft. AGL ****C-38A will use 500 ft AGL for both takeoff and approach and 1000 ft AGL for simulated engine out emergencies.****	C-38A simulated engine out emergencies should normally be initiated prior to configuration, unless required for training.
Simulated Two Engine-Failure. (Two engines at idle) (C-22B only)	10,000 ft. AGL (min)	Simulated two-engine failure training will be performed at altitude only. Two-engine out landings will not be performed for training/ evaluation.
Simulated Engine Out Missed Approach	C-38. Initiate at or above 300ft AGL C-22: Initiate at or above 200 ft. AGL	In the event a go-around below authorized missed approach altitude, use all engines.
Low Approaches with Men and Equipment on Runway	Initiate at or above 500 ft. AGL	
Planned Go-Arounds with Simulated Emergencies other than Engine out	Initiate at or above 100 ft. AGL	
Steep Turns	5,000 ft. AGL (min)	Limited to daylight VMC
Emergency Descents	Complete recovery prior to 10,000 ft. AGL	Limited to daylight VMC with radar monitor if available and practical.

MANUEVER	Altitude Restriction	Other Restrictions
Jammed Stab. Approach	12,000 ft. AGL (min)	
Runaway Pitch Trim	5,000 ft. AGL (min)	
Aborted Takeoffs		Limited to daylight on dry, hard surface runway only. Initiate prior to reaching 100 knots and only when the accelerate-stop distance provides an adequate safety margin. Initiate only by stating "REJECT"

9.7. Prohibited In-Flight Maneuvers

9.7.1. Prohibited maneuvers will only be accomplished in the simulator and not be practiced or demonstrated in-flight.

9.7.2. The following are prohibited maneuvers:

9.7.2.1. Simulated engine-out takeoffs.

9.7.2.2. Aborted takeoffs (except as required by training directive).

9.7.2.3. Full stalls.

9.7.2.4. Unusual attitudes.

9.7.2.5. Dutch roll demonstrations.

9.7.2.6. Simulated emergency descents (except as required by training directive).

9.7.2.7. No-flap approach and landing (except C-38A).

9.7.2.8. No-slat landings.

9.7.2.9. Simulated jammed stabilizer approach and landings.

9.7.2.10. Split flap landings.

9.7.2.11. Landing with inoperative hydraulic system.

9.7.2.12. Tactics maneuvers (unless MAJCOM approved).

9.7.2.13. Simulated two engine out landings or go-arounds (C-22B).

9.7.2.14. Circling approach with simulated engine out.

9.8. Instructor/Evaluator Pilot Briefing.

9.8.1. Before all training and evaluation missions, instructors and evaluators will brief their crews on all aspects of the mission according to locally developed briefing guides.

9.8.2. Briefing guides will be approved by 201 AS/DOV.

9.9. Instructor/Evaluator Debriefing.

9.9.1. Review and evaluate overall training performed.

9.9.2. Review training requirements fulfilled for each student and aircrew member.

9.9.3. Answer technical questions.

9.9.4. For crewmembers requiring further training, assign specific areas for further study prior to the next training period.

9.9.5. Complete training and evaluation records.

9.10. Simulated Instrument Flight.

9.10.1. Artificial vision restricting devices are not authorized for any phase of flight.

9.10.2. Simulated instrument flight may be flown and logged without the use of a vision- restricting device.

Chapter 10

LOCAL PROCEDURES

10.1. Not used.

Chapter 11

FLIGHT ENGINEER (FE) AND CREW CHIEF (CC) PROCEDURES

11.1. General. This chapter outlines additional procedures not in the aircraft flight manuals or other technical orders for FEs and CCs.

11.2. Responsibilities.

11.2.1. The FE or the CC is responsible for the condition of the aircraft, keeps the Aircraft Commander informed at all times of changes in aircraft status, and the FE acts as enlisted aircrew coordinator.

11.2.2. FEs and CCs will supervise or perform aircraft servicing and maintenance at en route stations as required to maintain aircraft in a mission-capable condition.

11.3. Authority to Clear Red X Symbols in the AFTO Form 781A. FEs and CCs, authorized by orders, may clear red X write-ups on all systems of the aircraft on which they are qualified**.**

11.4. Refueling and Defueling. All qualified FEs and CCs are authorized to refuel and de-fuel aircraft**.**

11.5. Concurrent Servicing Operations (CSS). Concurrent servicing is authorized according to T.O. 00-25-172.

11.6. Aircraft Taxi.

11.6.1. FEs and CCs are authorized to taxi 201 AS aircraft IAW MAJCOM directives.

11.6.2. FEs/CCs will not taxi when the RCR is worse than wet, or visibility is less than 1/4 mile.

11.7. Pushback Operations.

11.7.1. The crew chief will be on headset for all pushback operations away from home station.

11.7.2. FEs will assist the crew chief by assuring proper ground clearance is available, nose landing gear (NLG) scissors are connected, and the NLG down-lock pin is removed prior to boarding aircraft.

11.7.3. Reference applicable flight manuals for specific procedures.

11.8. Local TOLD Card.

11.8.1. The FE will complete the entire TOLD card, including the landing portion, prior to departure.

11.8.2. Use the takeoff GW to compute the data.

11.9. Multiple Full-Stop Landings. For all practice full-stop landings, the FE will complete a new TOLD card using actual GW, field, and weather conditions.

11.10. Monitoring Primary Radios.

11.10.1. The FE will monitor the primary radio for flight clearances, altitudes, heading changes, and radio frequencies.

11.10.2. The FE is not required to copy departure clearances.

11.11. Use of Unqualified Flight Engineers. When supervised by an instructor or flight examiner FE, an unqualified FE may occupy the FE position during takeoff and landing.

Chapter 12

FLIGHT ATTENDANT (FA) PROCEDURES AND FORMS

12.1. General. This chapter outlines procedures for FAs not in the aircraft flight manuals or elsewhere in this volume.

12.2. Responsibilities.

12.2.1. The FA is the direct contact between the National Guard and the passenger.

12.2.2. The FAs primary duties are to instruct passengers in the use of emergency equipment and conduct emergency egress when necessary.

12.2.3. Additionally, FAs act as the Aircraft Commanders cabin representatives, provide cabin service and maintain cabin cleanliness throughout the mission.

12.2.4. The first FA acts as FA supervisor. As supervisor, the first assigns FAs as 2nd, 3rd or 4th FA and delegates specific duties and responsibilities to each FA.

12.2.5. At home station, other FAs may be required to assist with premission and post-mission duties.

12.3. FA Standards.

12.3.1. When meeting contacts in the Pentagon, FAs must wear Class B or appropriate business attire (business suit with tie, conservative civilian dress, blazer with dress slacks or skirt).

12.3.2. The Aircraft Commander or another flight deck crewmember should attend the brief with the 1st FA to address questions regarding the mission. As a minimum, ensure two FAs are present for accuracy of requirements and security of funds.

12.3.3. Any problems encountered with passengers during the mission (i.e. mistreating the aircraft, disorderly behavior, etc.) should be forwarded to the contact through the Aircraft Commander for appropriate action.

12.4. Pre-mission Duties.

12.4.1. Contact the Aircraft Commander or current operations for draft itinerary times and any information already received concerning cabin service requirements. Provide en route mission ice requirements at this time.

12.4.2. Call or visit the mission contact officer to determine cabin service requirements. Get the name of the onboard contact and obtain funds, if available (if not received from the mission contact, obtain funds from the In-flight Funds Custodian). Complete all portions of the AMC Form 409, Air Passenger Specialist Mission Planning Worksheet.

12.4.3. The first FA will conduct a FA briefing to assign FA positions and duties. For unplanned or planned emergencies, all FAs will act in the position to which they are assigned.

12.5. Preflight Duties.

12.5.1. Perform applicable preflight or en route checklists. Check that applicable passenger information cards are properly distributed.

12.5.2. Upload food and fleet items and stow as necessary.

12.5.3. Prepare meals as required. Focus of preflight duties will be directed toward passenger service to ensure completion prior to station time and should not be inhibited by crew meal service.

12.5.4. Coordinate receipt of passenger manifests.

12.5.5. Coordinate passenger baggage loading and security. If loading space-available passengers at a non-US military facility, perform the following anti-hijacking inspections as directed by the Aircraft Commander:

12.5.5.1. Check for proper identification and document passengers on AF Form 96, Passenger Manifest.

12.5.5.2. Inspect baggage in an area well away from the aircraft.

12.5.5.3. Load baggage to prohibit in-flight passenger access (except for carry-on baggage).

12.5.5.4. Inspect carry-on baggage prior to boarding passengers.

12.5.6. Coordinate passenger loading. Accomplish passenger briefing, if required.

12.6. Passenger Handling.

12.6.1. Keep the Aircraft Commander informed of all passenger problems, unusual requests, etc.

12.6.2. Coordinate with the Aircraft Commander before answering questions about the mission.

12.6.3. Do not unduly alarm passengers by relaying details of abnormal conditions not readily discernible by passengers.

12.7. Border Clearance.

12.7.1. Customs, immigration, public health and agriculture require certain forms for border clearance. The FA is the custodian for these and other required forms and will ensure adequate quantities are aboard the aircraft prior to takeoff.

12.7.2. All first FAs should be familiar with the Foreign Clearance Guide requirements for applicable destinations and will distribute forms to the crew and passengers, as necessary, for completion prior to landing.

12.7.3. Ensure paperwork is forwarded to applicable personnel at en route and terminating stations.

12.8. En Route and Post-Flight Duties.

12.8.1. FAs will provide cabin and meal service, while maintaining the highest standards of safety and cabin discipline. During critical phases of flight or turbulence, ensure all loose items are stowed and cabin service is suspended, if necessary.

12.8.2. Attend to flight crew needs when passenger service duties permit.

12.8.3. Complete applicable border clearance requirements and forms.

12.8.4. Assist with passenger deplaning and baggage off-load or transfer. Ensure passengers do not leave required baggage or personal items on the aircraft.

12.8.5. FAs are responsible for aircraft cleanup. They are also responsible for ensuring that all food items are properly stowed and aircraft is mission ready before departing for over-night stops

12.8.6. Arrange or procure food and beverages required for subsequent mission legs.

12.9. Forms.

12.9.1. AMC Form 409, **Mission Planning Worksheet.**

12.9.1.1. Purpose - This form is designed to assist the FA in organizing passenger service requirements. The reverse of the form is a checklist to help inventory mission supplies.

12.9.1.2. Procedures - Record details received from the contact officer on the front of the form. Use the reverse as a pre-mission and preflight check-off list.

12.9.1.3. Overprints - Individual unit may overprint unique requirements on this form.

12.9.2. AMC Form 410, **Mission Expense Record.**

12.9.2.1. Purpose - This form is used to record all expenses related to mission requirements.

12.9.2.2. Procedures - On each mission, separate copies of the AMC Form 410 will be maintained for passenger and crew meals/special requests. Ensure receipts are separated and retained for mission contact/Aircraft Commander perusal. Upon mission completion, the first FA will annotate the method of disposal of all excess, non-perishable passenger food items on the reverse side of the AMC Form 410. If the mission contact wants the leftover items, document by writing “All leftover items given to the contact”. If the contact does not want the leftover items, annotate that “leftover items were disposed of per contact officers instruction”, and give them to charity. In both instances, the FA will sign below either statement and present it to the Aircraft Commander for approval. See 89 AWI 34-201 for detailed instructions.

12.9.2.3. Overprints - Individual unit may overprint unique requirements on this form.

Chapter 13

AIRCRAFT SECURITY NONCOMMISSIONED OFFICER (ASNCO) PROCEDURES AND FORMS

13.1. General.

13.1.1. This chapter outlines aircrew responsibilities and procedures for aircraft security NCOs (ASNCO).

13.1.2. The 113th Security Police Squadron ASNCOs are integral members of the aircrew and are under the authority of the Aircraft Commander. The ASNCOIC will be pre-designated and will supervise the other ASNCOs during the mission.

13.2. Responsibilities.

13.2.1. ASNCOs protect the aircraft and associated equipment according to AFI 31-101, Vol. 1, *Air Force Physical Security Program* and **Chapter 7** of this volume.

13.2.2. ASNCOs are responsible to the Aircraft Commander, who approves and coordinates any authorized deviations from the procedures in AFI 31-101, Vol. 1.

13.2.3. ASNCOs coordinate aircraft security protection with local military and civilian authorities. Assure local security efforts are smoothly integrated into the total security system to protect the aircraft.

13.3. Premission Procedures.

13.3.1. All ASNCOs should attend the Aircraft Commander's aircrew briefing, when applicable.

13.3.2. The ASNCOIC briefs all ASNCOs on mission requirements, threat analysis, and specific duty assignments for the mission.

13.3.3. The ASNCOIC contacts the Aircraft Commander when notified of the mission and assists in coordinating advance security support at en route destinations as required.

13.4. Preflight Procedures.

13.4.1. ASNCOs will arm themselves and will normally report to the aircraft not later than 2 hours prior to scheduled departure time.

13.4.2. Security Check. Conduct a complete security check of the aircraft, inside and outside. Assume sentry positions as directed by the ASNCOIC.

13.4.3. Mission Information. The ASNCOIC is responsible for obtaining passenger manifests and crew orders, mission itinerary cards, en route stop cards, and the Aircraft Entry Control Log.

13.4.4. Aircraft Access Control. Personnel listed on the applicable unescorted entry list (UEL) or the passenger manifest will be granted unescorted entry on the aircraft. Either the Aircraft Commander or the on-board contact must authorize manifest changes. ASNCOs board the aircraft only after all passengers and other aircrew members have boarded.

13.4.5. Baggage Control. One ASNCO will be positioned as a sentry at the baggage compartment until all baggage is loaded and the compartment is secured. Assure all baggage is properly identified. Cross-check baggage labels against the passenger manifest.

13.5. In-Flight Procedures.

13.5.1. Report all security problems to the Aircraft Commander.

13.5.2. When the aircraft is transporting space-available passengers, the ASNCOIC assigns ASNCOs to occupy seats in each passenger compartment where space-available passengers are seated.

13.5.3. Don't allow space-available passengers to have access to their stowed baggage in-flight.

13.6. Post-Flight Procedures.

13.6.1. When the aircraft blocks in, ASNCOs deplane first.

13.6.2. Take up pre-designated positions fore and aft of the aircraft. When the baggage compartment is opened, one ASNCO monitors baggage unloading and remains as a sentry until the baggage compartment is secured.

13.6.3. If local security forces will augment ASNCOs during ground times, the ASNCOIC will brief them on their duties and responsibilities.

13.6.4. At least one ASNCO will always be stationed as primary sentry at all times. The ASNCOIC schedules ASNCOs for sentry duty.

13.7. Post-mission Procedures.

13.7.1. Continued Security Protection. If the aircraft is to maintain upgraded security status, the ASNCOs will maintain security protection until relieved by appropriately cleared sentries.

13.7.2. Terminating Security Protection. If the security status is to be terminated, ASNCOs remain at the aircraft until all passengers and baggage are unloaded and the Aircraft Commander terminates the upgraded security status according to AFI 31-101, Vol. 1, *Air Force Physical Security Program*.

13.7.3. After Termination. When relieved, turn in weapons and ammunition to the armory. Comply with local debriefing requirements. The ASNCOIC turns in the completed AF Form 1298, Aircraft Entry Control Log.

13.8. AF Form 1298, Aircraft Entry Control Log. Consult local directives concerning completion and authentication procedures for this form.

Chapter 14

AIRCREW CHEMICAL OPERATIONS AND PROCEDURES

14.1. General.

14.1.1. Although 201 AS crews should not be tasked to fly into a chemical/biological contaminated area, they may operate in areas within range of chemical/biological attack. This volume is intended to enhance other chemical defense training and provides the crewmember a basic understanding of utilizing the Ground Crew Ensemble (GCE) in a chemical-biological threat area (CBTA). It combines information from technical orders and unit inputs to form a single source document.

14.1.2. This volume briefly describes the nature of the chemical threat and agents that may be faced. Secondly, it discusses some of the situations and problems the aircrew may encounter in a CBTA. Preparatory actions and countermeasures are examined so the crewmember can make optimal use of the GCE.

14.2. Factors Influencing the Chemical Warfare (CW) Agent Hazard.

14.2.1. Major instances in which a crew may be exposed to chemicals are through inhalation, absorption through the skin, eyes, and ingestion. Contaminated drink and food are considered harmful, but immediate concerns must be contamination avoidance to the maximum extent, limit exposure of the skin and eyes, as well as avoid breathing the contaminants. Factors affecting persistence are weather, agent physical characteristics, method of dissemination, droplet size, and the terrain.

14.2.2. Weather. Factors include temperature, wind, humidity, precipitation and atmospheric stability. For example, high winds and heavy rains reduce the contamination hazard. Conversely, lack of wind, overcast-skies, and moderate temperatures favor persistence.

14.2.3. Agent Dissemination. Disseminated as vapors, aerosols, or liquids. Solids seem unlikely, but agents may become solids at lower temperatures.

14.2.4. Agent Droplet Size. Persistence factor is determined by droplet size. Agents may be mixed with other chemicals ("thickeners"), and form large drops making removal more difficult.

14.2.5. Surface and Terrain. CW agent clouds tend to follow the terrain, flowing over countryside and down valleys. Chemicals persist in hollows, depressions, and other low areas. Rough terrain retards cloud movement. Flat countryside allows a uniform, unbroken cloud movement. Vegetated areas are more contaminated than barren terrain. Liquid agents soak into porous surfaces, making evaporation much slower than for nonporous surfaces.

14.3. Categories of Chemical Warfare Agents.

14.3.1. CW agents having military significance may be categorized as nerve, blister, choking, and blood. Because they are produced biologically, toxins technically are not chemical agents. However, they are considered a potential CW threat.

14.3.2. Nerve Agents.

14.3.2.1. Military Significance. Nerve agents are the most lethal and fastest acting of the standard CW agents. These agents affect the nervous system and are highly toxic whether inhaled, ingested, or absorbed through the skin. Persistency ranges from hours to many days.

14.3.2.2. Symptoms of Exposure. Nerve agent exposure is difficult to distinguish. Normally, symptoms of nerve agent exposure appear in the following order. Initial exposure includes a runny nose, tightness of the chest, dimness of vision, and pinpointing of the pupils. These symptoms are usually followed by difficulty in breathing, drooling, involuntary defecation and urination. Finally, exposure will lead to confusion, drowsiness, convulsions, coma and death.

14.3.2.3. Onset of Symptoms. Lethal respiratory dosages will cause death in 1 to 10 minutes and liquid exposure to the eyes will kill almost as rapidly. Depending on factors such as the amount and type of nerve agent, absorption through the skin may cause death anywhere from 1 to 2 minutes to 1 to 2 hours. Nerve agents are retained in the body for an extended period; thus intermittent, cumulative exposure to low amounts can lead to the same ultimate effect as a single exposure to a higher amount.

14.3.2.4. Protection. The full protective ensemble is effective against nerve agents. When properly worn, the various chemical protective masks prevent inhalation of nerve agents. Both the aircrew coveralls and ground crew ensemble provide limited protection to the skin. All layers of the outer garment must be protected against saturation of liquids, chemical agents, water, or petroleum.

14.3.2.5. Antidotes/Prophylaxis. Antidotes are effective in combating effects of nerve agent exposure. These antidotes may be effective if given to a victim having advanced symptoms, and as long as the victim is made to continue breathing. People who use the antidotes must be seen by medical personnel and may not be combat-ready for several days. Currently, nerve agents are the only agents with an available field antidote. This antidote can be self-administered by the exposed individual or through self-aid buddy care. In addition, medical personnel have more specialized treatments available.

14.3.3. Blister Agents.

14.3.3.1. Military Significance. Blister agents are dispensed as vapors or liquids, and may be encountered as solids. These agents primarily affect the eyes, respiratory tract, and the skin.

14.3.3.2. Symptoms of Exposure. Placed on the skin, a drop the size of a pinhead can produce a blister of one inch in diameter. This action is accentuated by moisture; hence, a more severe danger is present during periods of sweating. The groin and armpits, which tend to be sweaty, are especially susceptible to blister agents. Blister agents that come in contact with the eyes lead to redness, watering of the eyes, blurring of vision, sensitivity to light, and frequently, blindness. Inhalation causes serious damage due to burns and blisters to the mouth, nose, throat, and lungs. Incapacitation may last for days or weeks; aircrews will probably be unable to fly for indefinite periods. After hospitalization, complications from blister agent exposure can arise and may be fatal.

14.3.3.3. Onset of Symptoms. Blister agents are quickly absorbed through the skin. However, it usually takes several minutes (up to five minutes and as long as several hours) for the symptoms to appear. They act most rapidly in liquid form, but are also effective in vapor form.

14.3.3.4. Protection. The full protective ensemble is effective against blister agents. Exposed areas must be cleaned thoroughly immediately after exposure. Blister agents are easily transferred from contaminated surfaces; thus great care must be taken to avoid contact with any contamination.

14.3.4. Choking Agents.

14.3.4.1. Military Significance. These agents are disseminated as vapors and when inhaled affect the respiratory system by damaging the lungs. Persistence is very brief, and dissipate rapidly (within minutes) under most field conditions.

14.3.4.2. Symptoms of Exposure. Choking agents cause coughing, choking, tightness of the chest, nausea, headache, and watering of the eyes. Choking agents can be lethal, with death normally from the lungs filling with fluids, making breathing difficult or impossible.

14.3.4.3. Onset of Symptoms. Exposure to choking agents has an immediate effect. Victims experience slightly delayed effects, such as painful cough, breathing discomfort, and fatigue.

14.3.4.4. Protection. Both the aircrew and ground crew protective mask is extremely essential to protect against exposure; the entire protective ensemble should be used as directed.

14.3.5. Blood Agents.

14.3.5.1. Military Significance. Blood agents are usually dispensed as vapor or aerosol and inhaled. Under most field conditions they may briefly persist on target (up to 10 minutes).

14.3.5.2. Symptoms of Exposure. Exposure to a single breath of blood agent causes giddiness, headaches, confusion, and nausea. As dose increases, breathing becomes more difficult. The victim will have deep, uncontrollable breathing and cramps, then loss of consciousness. Death is certain if the victim receives no medical aid.

14.3.5.3. Protection. Blood agents are breathing hazards. The full ensemble is most effective because the mask provides the breathing protection needed.

14.3.5.4. Additional Threats. Blood agents will damage mask filters. All personnel must change mask filters at the earliest possible opportunity after a blood agent attack. (*EXCEPTION:* Filters installed in aircrew CRU-80/P filter packs will be removed and replaced by aircrew life support (ALS) personnel (AFSC 1T1X1)).

14.4. Aircrew Operations.

14.4.1. Performance of duties while wearing chemical defense equipment can be extremely physically and mentally demanding. Special preparation and crew coordination are required to operate under chemical conditions. The information presented here will enable the aircrew to successfully operate in a chemical environment by recognizing limits and exploiting the capabilities of the chemical defensive equipment.

14.4.2. Non-flying Ground Operations. Ground operations can represent the highest threat to aircrew safety. Protection from enemy attacks and exposure to liquid chemical agents is paramount. Aircrew should be advised to limit activities to essential duties only, and to separate ground duties from air duties. The ground ensemble is designed for quick donning and heavier levels of concentrations that can be more evident during ground operations. The aircrew ensemble is designed for the unlikely event of light concentration levels, that could be found during flying operations and transmitted to and from the aircraft.

14.4.3. Body Temperature/Fluids Control. Heat stress and dehydration are serious hazards while wearing the Aircrew Chemical Defense Ensemble. Aircrew members need to control perspiration rates and limit activities to essential duties only. The need to consciously slow the work pace while

performing physical labor, share workloads and monitor each other's physiological condition is essential.

14.4.4. Restricted Communications. Normal communications are limited while wearing the chemical defense mask. Using the mini-amplifier/speaker with the mask will enhance communications. Otherwise, visual signals may be used to compensate.

14.5. Limitations.

14.5.1. Aircrews must be mentally prepared to face the dangers of chemical weapons. Flight planning must be thorough and aircraft commanders should emphasize chemical defensive operations during mission planning, hazards and countermeasures, plans for on-load/offload in the event of a ground attack, and plans for the return leg in the event of a contaminated aircraft. Alternate scenario plans should also be considered in the event conditions change.

14.5.2. Wearing any of the chemical defense masks/filter assemblies imposes the following limitations: The mask/filter assembly prevents the detection of fumes from fuel, hydraulic fluid and oil and the filter assembly will not protect the user against ammonia fumes and carbon monoxide gas.

14.6. GCE Issue.

14.6.1. Aircrews will be issued sized GCEs at home station.

14.6.2. Crewmembers will check mobility bag contents and correct sizes, and ensure their GCE is available at all times while in a CBTA.

14.7. Operations in a Chemical-Biological Threat Area (CBTA).

14.7.1. Establishing Threat Level. Aircrews should monitor C2 channels to ensure they receive the latest information concerning the destination's alert condition. Diversion of AMC aircraft to alternate "clean" locations may be required, unless operational necessity dictates. The local AMC C2 Center will direct aircrews to undergo medical pretreatment for chemical exposure.

14.7.2. Protective Equipment Postures. Standardized USAF alert conditions and recommended ACDE requirements are listed below based on a chemical-biological threat. *NOTE*: These alarms may be different based on the host country requirements.

14.7.2.1. "ALL CLEAR"- Attack is not probable, nor is chemical-biological contamination present. Notification--Verbal; removal of warning flags/placards. GCE requirements--equipment is issued, prepared, and readily available.

14.7.2.2. "ALARM YELLOW"- Attack is probable. Notification--Verbal; posting of yellow warning flags/placards. GCE requirements--appropriate components should be worn with the mask/hood immediately available commensurate with ground duties.

14.7.2.3. "ALARM RED" ("ALARM BLUE" in Korea). Attack is imminent or in progress. Notification--Verbal; posting of red warning flags/placards; one minute warbling tone on siren (3 seconds on-1 second off). Aircraft inbound will hold/divert. On the ground, personnel will take immediate cover and don full GCE.

14.7.2.4. "ALARM BLACK"- Contamination is suspected or present. Notification--posting of black warning flags/placards; warbling tone on siren (1 second on-1 second off). GCE requirements--full ensemble will be worn. Personnel will remain indoors or under liquid agent cover.

14.8. Donning Equipment.

14.8.1. Aircrew will don GCE based on the alarm condition.

14.8.2. When wearing the GCE, Atropine and 2 PAM Chloride auto injectors will be kept in the upper left pocket. This standardized location will allow personnel to locate the medication should an individual be overcome with nerve agent poisoning.

14.8.3. M-9 paper on the GCE will facilitate detection of liquid chemical agents and GCCA processing. M-9 paper should be placed on the GCE prior to entering a CBTA when an alarm “yellow” or higher has been declared.

14.8.4. When inbound to CBTA, prior to descent, the aircraft commander will ensure crew and passengers don appropriate protective equipment IAW arrival destination's mission oriented protective posture (MOPP) level and brief aircrew operations in the CBTA. As a minimum, this briefing will include: flight deck isolation, oxygen requirements, air conditioning system requirements, CW clothing requirements, ground operations and MOPP levels.

14.9. Ground Operations.

14.9.1. Off/On Considerations. Extreme care must be exercised to prevent contamination of aircraft interiors during ground operations, particularly to the flight deck area. Reduce the number of personnel entering the aircraft. Contaminated engine covers, safety pins and chocks will not be placed in the aircraft unless sealed in clean plastic bags.

14.9.2. Physiological Factors. Aircraft commanders must be very sensitive to the problems resulting from physical exertion while wearing GCE. The aircraft commander should consider factors such as ground time, temperature and remaining mission requirements when determining on/off-load requirements. Individuals involved should be closely monitored for adverse physiological effects.

14.9.3. Communications. Conducting on/off-loading operations while wearing the complete ACDE complicates communications capability. Use the mini-amplifier/speaker or the aircraft public address system and augment with flashlight and hand signals as required.

14.10. Chemical Attack During Ground Operations.

14.10.1. If an attack (Alarm Red) occurs during on/off-loading operations or transport to and from aircraft, take immediate cover away from the aircraft/vehicle. Don full GCE.

14.10.2. Aircrews could be expected to forward information concerning medical aid, damage estimates, and unexploded ordinance. Appropriate information may be forwarded via the aircraft radios to controlling agencies.

14.11. Crew Rest Procedures.

14.11.1. Since 201 AS aircrew cannot fly contaminated aircraft; it may become necessary for the aircrew to rest in a contaminated CBTA.

14.11.2. Personnel caught in a chemical attack will be airlifted out of the CBTA as lift becomes available.

14.12. Contamination Control Areas (CCA) Procedures.

14.12.1. Aircrews will proceed to the ground crew contamination control area (GCCA) for processing. All personnel will remove protective clothing IAW established procedures located in the GCCA.

14.12.2. Do NOT proceed to the aircrew contamination control area (ACCA). This area is used solely to decontaminate personnel wearing the Aircrew Chemical Defense Ensemble.

14.13. Work Degradation Factors.

14.13.1. Work timetables need to be adjusted to minimize thermal stress caused by wearing the GCE.

14.13.2. To estimate how much time it takes to perform a task or operation, (1) take the Task

Time Multiplier for the appropriate Work Rate and ambient air temperature from **Table 14.1.** and (2) multiply it by the time it normally takes to perform the task. For example, given a heavy work rate and an air temperature of 70F, the crewmember should expect a normal 1hour task to take 2.1 hours while wearing ACDE. A more extensive discussion of this subject is found in AFMAN 32-4005, *Personnel Protection and Attack Actions.*

Table 14.1. Degradation Factors

Task Time Multipliers			
Work Rate	**Temperature**		
	20-49°F	**50-84°F**	**850100°F**
Light	1.2	1.4	1.5
Moderate	1.3	1.4	3.0
Heavy	1.7	2.1	5.0

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 11-2, *Aircraft Rules and Procedures*

AFMAN 10-206, *Operational Reporting*

AFMAN 32-4005, *Personnel Protection and Attack Actions*

AFMAN 55-9, UV *Standard for Terminal Instrument Procedures (TERPS)*

AFH 11-203**,** *Weather for Aircrews*

NGB 55-2 (*Operational Support Aircraft Procedures*)

AMC-DOV (AR) 9624, *Report of Violations and Policy/Procedures Waivers*

AFI 11-202 Vol. 1, *Aircrew Training*

AFI 11-202 Vol. 2, *Aircrew Standardization/Evaluation Program*

AFI 11-202 Vol.3, *General Flight Rules*

AFI 11-209, *Air Force Participation in Aerial Events*

AFI 11-218, *Aircraft Operation and Movement on the Ground*

AFI 11-401, *Flight Management*

AFI 13-207, *Preventing and Resisting Piracy [Hijacking]*

AFI 51-401**,** *Information Security Program Management*

AFI 21-101, *Maintenance Management of Aircraft*

AFI 23-202, *Buying Petroleum Products, and Other Supplies and Services Off-Station*

AFI 31-101, Vol. 1, *Air Force Physical Security Program*

AFI 34-219**,** *Alcoholic Beverage Program*

AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel*

AFI 48-123, *Medical Examinations and Standards*

AFJI 48-104, *Quarantine Regulations of the Armed Forces (Joint)*

AFI 91-204, *Safety Investigations and Reports*

AFPAM 91-212, *Bird Aircraft Strike Hazard (BASH) Management Techniques*

Terms

NOTE: The explanation or definition of terms and abbreviations commonly used in the aviation community can be found in FAR, Part 1, DOD FLIP General Planning, Chapter 2 and Joint Pub 1-02 (DOD Dictionary).

Advance Notice Message—A message dispatched when required by the USAF Foreign Clearance Guide

(FCG) to provide advance notification to interested agencies of mission itinerary and support requirements. It may be combined with a diplomatic clearance request message.

Air Force Satellite Communications (AFSATCOM) System—An ultra high frequency (UHF) satellite communications system that provides reliable UHF, two-way command and control communications between the National Command Authority and globally deployed nuclear forces. The system is composed of satellites of the United States Navys Fleet Satellite Communications System, the Air Forces Satellite Data System, UHF single-channel transponders integrated into Defense Satellite Communications System III satellites, ground, and airborne terminals.

Air Force Component Commander (AFCC)—In a unified, subunified, or joint task force command, the Air Force commander charged with the overall conduct of Air Force air operations.

Aircraft Security NCO (ASNCO)—Security Police personnel assigned as integral members of OSA aircrews to protect aircraft and associated personnel and equipment. See chapter 15 of this AFI for an amplified explanation.

Airlift—Aircraft is considered to be performing airlift when manifested passengers or cargo are carried.

Air Mobility Control Center (AMCC)—Provides global coordination of tanker and airlift for AMC and operationally reports to the AMC TACC. Functions as the AMC agency that manages and directs ground support activities and controls aircraft and aircrews operating AMC strategic missions through overseas locations.

Air Mobility Element (AME)—The air mobility element is an extension of the Air Mobility Command Tanker Airlift Control Center deployed to a theater when requested by the geographic combatant commander. It coordinates strategic airlift operations with the theater airlift management system and collocates with the air operations center whenever possible. Also called AME. See also air operations center; Tanker Airlift Control Center.

Air Reserve Component (ARC)—Refers to Air National Guard and AFRES forces, both Associate and Unit Equipped.

Antarctic Flight—Flight conducted south of 56 degrees south latitude.

Arctic Flight—Flight conducted between 15 degrees and 180 degrees west longitude (exclusive of Iceland) north of 50 degrees north latitude between 1 October and 15 April. Transoceanic flights are excluded.

Arrival Time—The block-in time, rather than the landing time.

Air Route Traffic Control Center (ARTCC)—The principal facility exercising en route control of aircraft operating under instrument flight rules within its area of jurisdiction. Approximately 26 such centers cover the United States and its possessions. Each has a communication capability to adjacent centers.

Bird Aircraft Strike Hazard (BASH)—An Air Force program designed to reduce the risk of bird strikes.

Bird Condition Low—No significant bird activity, which would present a probable hazard to flying operations. No operating restrictions.

Bird Condition Moderate—Concentrations of 5 to 15 large birds (waterfowl, raptors, gulls, etc.) or 15 to 30 small birds (terns, swallows, etc.) observable in locations that represent a probable hazard to flying

operations.

Bird Condition Severe—Concentrations of more than 15 large birds (waterfowl, raptors, gulls, etc.) or more than 30 small birds (terns, swallows, etc.) observable in locations that represent a probable hazard to flying operations.

Block Time—Time determined by the scheduling agency responsible for mission accomplishment for the aircraft to arrive at (block in) or depart from (block out) the parking spot.

BLUE BARK.—US military personnel, US citizen civilian employees of the Department of Defense (DOD), and the dependents of both categories who travel in connection with the death of an immediate family member. It also applies to escorts for dependents of military members traveling under competent orders.

Border Clearance—Those clearances and inspections required complying with federal, state, and local agricultural, customs, immigration, and immunization requirements.

Category I Route—Any route that does not meet the requirements of a category II route, including tactical navigation and over-water routes.

Category II Route—Any route on which the position of the aircraft can be accurately determined by the overhead crossing of a radio aid (NDB, VOR, TACAN) at least once each hour with positive course guidance between such radio aids.

CLOSE HOLD—USAF/CVAM term assigned to all aspects of a Special Air Mission when destination, passengers names, or other mission details are restricted from general release.

COIN ASSIST—Nickname used to designate dependent spouses accompanying dependent children and dependent parents of military personnel reported missing or captured. They may travel space available on military aircraft for humanitarian purposes on approval of the Chief of Staff, United States Army; Chief of Staff, United States Air Force; Chief of Naval Operations; or the Commandant of the Marine Corps.

Command and Control (C2)—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called C2.

Command and Control Information Processing System (C2IPS)—Computer-based information transmission and information handling for command and control functions associated with the Director of Mobility Forces (DIRMOBFOR), AME fixed units, and TALCE. Interfaces with and automatically updates the Global Decision Support System (GDSS).

CONFERENCE SKYHOOK—Communication conference available to help aircrews solve in-flight problems that require additional expertise.

Contingency Mission—Mission operated in direct support of an OPORD, OPLAN, disaster, or emergency.

Critical Leg—The segment of a mission that determines the Aircraft Critical Load which may be carried over that route.

Critical Phase Of Flight—Takeoff, air refueling, formation below minimum safe altitude, low level, airdrop, approach, and landing.

CVAM (Special Air Missions Office)—Agency within the office of the USAF Vice Chief of Staff responsible for scheduling and committing all Air Force airlift required to support the White House or any other executive branch of the government. This office is the single coordinating agent for the SAM aircraft fleet and schedules 89 AW special air missions, as well as 201 AS Congressional Delegation Missions.

Deadhead Time—Duty time for crewmembers positioning or depositioning for a mission or mission support function.

Departure Time—The block-out time, rather than the takeoff time.

Designated Courier—Officer or enlisted member in the grade of E-5 or above of the US Armed Forces, or a Department of State diplomatic courier, selected by the Defense Courier Service (DCS) to accept, safeguard, and deliver DCS material as directed. A primary aircrew member should be used as a courier only as a last resort.

Diplomatic Clearance Request Message—A message dispatched to request diplomatic clearance for over-flight and/or transit of foreign territories. Message content and addresses are specified in the USAF Foreign Clearance Guide (FCG). This message is usually combined with the advance notice message.

Direct Instructor Supervision—Supervision by an instructor of like specialty with immediate access to controls (for pilots, the instructor must occupy either the pilot or copilot seat).

Director, Mobility Forces (DIRMOBFOR)—Normally a senior officer who is familiar with the area of responsibility or joint operations area and possesses an extensive background in airlift operations. When established, the director of mobility forces serves as the designated agent for all airlift issues in the area of responsibility or joint operations area, and for other duties as directed. The director of mobility forces exercises coordinating authority between the airlift coordination cell, the air mobility element, the Tanker Airlift Control Center, the joint movement center, and the air operations center in order to expedite the resolution of airlift problems. The director of mobility forces may be sourced from the theater's organizations, United States Transportation Command, or United States Atlantic Command. Also called DIRMOBFOR.

Distinguished Visitor/Mystic Star Message (DV Message)—A classified message dispatched with the DVs name/status code and mission number. This message also establishes Mystic Star priority and requests Mystic Star network and support. This message is usually sent with the advance notice and diplomatic clearance request message.

Due Regard—Operational situations that do not lend themselves to International Civil Aviation Organization (ICAO) flight procedures, such as military contingencies, classified missions, politically sensitive missions, or training activities. Flight under "Due Regard" obligates the military aircraft commander to be his or her own air traffic control (ATC) agency and to separate his or her aircraft from all other air traffic (See FLIP General Planning, section 7).

Enlisted Aircrew Coordinator (EAC)—The appointed NCO crewmember (not necessarily the ranking) tasked with coordinating all enlisted aircrew issues and concerns in regards to a particular mission. Enlisted crewmembers should attempt to resolve most issues and concerns with the EAC who in turn reports to the aircraft commander.

Equal Time Point (ETP)—The point along a route at which an aircraft may either proceed to the destination/first suitable airport, or return to the departure base/last suitable airport in the same amount of time. It may be based on all engines operating or with one engine inoperative.

Estimated Time of Arrival (ETA)—Same as estimated block-in time. Landing time is different than ETA.

Estimated Time of Block-in/Block-out (ETB)—Same as estimated time aircraft door will open for arrival or close for departure.

Estimated Time of Departure (ETD)—Same as estimated block-out time. Takeoff time is different than departure time.

Estimated Time In Commission (ETIC)— Estimated time to complete required maintenance.

Extended Range Operations—For twin-engine aircraft, those flights conducted over a route containing a point further than 120 minutes flying time at the one-engine inoperative cruise speed (under standard conditions in still air) from a suitable en route alternate.

Familiar Field—An airport in the local flying area where unit assigned aircraft routinely conduct transition training. The operations officer will designate familiar fields within the 201 AS local flying area.

First Pilots—First pilots are highly experienced copilots who are qualified IAW volumes 1 and 2 of this instruction to taxi, take-off, and land the aircraft from the left seat under the supervision of a qualified aircraft commander.

Global Decision Support System (GDSS)—AMC's primary execution command and control system. GDSS is used to manage the execution of AMC airlift and tanker missions.

Ground Time—Interval between engine shut down (or arrival in the blocks if engine shutdown is not scheduled) and next takeoff time.

Hazardous Cargo or Materials—Articles or substances that are capable of posing significant risk to health, safety, or property when transported by air. Classifications include explosive (class 1), compressed gas (class 2), flammable liquid (class 3), flammable solid (class 4), oxidizer and organic peroxide (class 5), poison and infectious substances (class 6), radioactive material (class 7), corrosive material (class 8), or miscellaneous dangerous goods (class 9). Classes may be subdivided into divisions to further identify hazard, i.e., 1.1, 2.3, 6.1, etc.

Hotel Reservation Message (HOTRES)—A message dispatched to request crew accommodations and transportation per the scheduled mission itinerary. This message is usually combined with the advance notice message and diplomatic clearance request message.

Inflight Passenger Service Specialist (FA)—Flight crew member to provide cabin service, instruct passengers in the use of emergency equipment, direct and control passengers under emergency conditions, and maintain cabin cleanliness. See **Chapter 12** of this AFI for an amplified explanation.

Itinerary Change Message (Itin Change)—A message dispatched to change the original itinerary, due to changes in the scheduled mission, published in the original advance notice message or diplomatic clearance message.

L-Band SATCOM—600 BPS satellite communications (SATCOM) system contracted through the International Maritime Satellite Organization (INMARSAT) used primarily for command and control. The system consists of a satellite transceiver, a laptop computer, and a printer.

Leg Time—Time between door closed on departure to door open on arrival.

Local Training Mission—A mission scheduled to originate and terminate at home station, generated for

training or evaluation, and executed at the local level.

Maintenance Status/Codes:—

A-1: No maintenance required. Fully Mission Capable (FMC).

A-2 (Plus Noun): Minor maintenance required, but not serious enough to cause delay. Attempt to describe the nature of the system malfunction to the extent that appropriate maintenance personnel will be available to meet the aircraft. When possible, identify system as mission essential (ME) or mission contributing (MC). Partially Mission Capable (PMC). PMC + M: Maintenance, PMC + S: Supply, PMC + B: Both.

A-3 (Plus Noun): Major maintenance. Delay is anticipated. Affected units or systems are to be identified as in A-2 status above. Not Mission Capable (NMC). NMC + M: Maintenance, NMC + S: Supply, NMC + B: Both.

A-4: Aircraft or system has suspected or known biological, chemical, or radiological contamination.

Mission—Movement of aircraft from a designated point of origin to a designated destination as defined by assigned mission identifier, mission nickname, or both in the schedule, mission directive, OPORD, OPLAN, or Frag order.

Mission Advisory—Message dispatched by command and control agencies, liaison officers, or aircraft commanders advising all interested agencies of any changes in status affecting the mission.

Mobility Air Force (MAF)—Forces assigned to mobility aircraft or MAJCOMs with operational or tactical control of mobility aircraft.

Operational Control (OPCON)—Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called OPCON.

Opportune Airlift—Transportation of personnel, cargo, or both aboard aircraft with no expenditure of additional flying hours to support the airlift.

Originating Station—Base from which an aircraft starts on an assigned mission. May or may not be the home station of the aircraft.

Operational Risk Management (ORM)—ORM is a logic-based, common sense approach to making calculated decisions on human, materiel, and environmental factors before, during, and after Air Force operations. It enables commanders, functional managers and supervisors to maximize operational capabilities while minimizing risks by applying a simple, systematic process appropriate for all personnel and Air Force functions.

Over water Flight—Any flight that exceeds power off gliding distance from land.

Permit to Proceed—Aircraft not cleared at the first US port of entry may move to another US airport on a permit to proceed. Customs officials at the first port of entry issue the Permit to Proceed. This permit lists the requirements to be met at the next point of landing, i.e. number of crew and passengers, cargo not yet cleared. Aircraft commanders are responsible to deliver the permit to proceed to the customs inspector at the base where final clearance is performed (Heavy monetary fines can be imposed on the aircraft commander for not complying with permit to proceed procedures).

Point of Safe Return—Most distant point along the planned route from which an aircraft may safely return to its point of departure or alternate airport with required fuel reserve.

Positioning and De-positioning Missions—Positioning missions are performed to relocate aircraft for the purpose of conducting a mission. De-positioning missions are made to return aircraft from bases at which missions have terminated.

Ramp Coordinator—Designated representative of the C2 CENTER whose primary duty is the coordination of ground handling activities on the ramp during large-scale operations.

Ramp Freeze—Term used at Andrews AFB to denote a set of security procedures within a fixed geographical area on the flight line to ensure the safety of high-level DVs. Generally, all vehicular traffic is prohibited in a designated area except for security police and personnel and vehicles directly supporting the departing or arriving DV. Refer to the Letter of Agreement titled “Procedures and Restrictions for DV movement” for further information.

Scheduled Takeoff Time—That time established in the mission itinerary for departure.

Scheduled Return Date (SRD) —Scheduling tool used by air mobility units to predict when crews will return to home station. It allows force managers to plan aircrew availability and provide crews visibility over monthly flying activities. AMC and AMC-gained aircrews (except those on standby at home station) will have an SRD established on their flight orders.

Significant Meteorological Information (SIGMET)—Area weather advisory issued by an ICAO meteorological office relayed to and broadcast by the applicable ATC agency. SIGMET advisories are issued for tornadoes, lines of thunderstorms, embedded thunderstorms, large hail, severe and extreme turbulence, severe icing, and widespread dust or sand storms. SIGMETs frequently cover a large geographical area and vertical thickness. They are prepared for general aviation and may not consider aircraft type or capability.

Special Air Mission (SAM)—Missions operated by aircraft assigned to the 89 AW at the direction of USAF/CVAM.

Special Air Missions Management System (SAMMS)—Interactive computer database system used by the 89 AW and USAF/CVAM to schedule and manage 89 AW special air missions and 201 AS CODEL missions.

Special Assignment Airlift Mission (SAAM)—Funded airlift that cannot be supported by channel missions because of the unusual nature, sensitivity, or urgency of the cargo or that requires operations to points other than the established channel structure.

Specifically Designated Special Air Mission (SDSAM)—Any mission specifically identified by USAF/CVAM as requiring special security procedures.

Stations Time—Normally, 30 minutes prior to departure time. Aircrews will have completed their preflight duties/appropriate checklists, and be at their crew positions.

Tanker Airlift Control Center (TACC)—The Air Mobility Command direct reporting unit responsible for tasking and controlling operational missions for all activities involving forces supporting US Transportation Command's global air mobility mission. The Tanker Airlift Control Center is comprised of the following functions: current operations, command and control, logistics operations, aerial port operations, aeromedical evacuation, flight planning, diplomatic clearances, weather, and intelligence. Also called TACC.

Tanker Task Force (TTF)—Force of tanker aircraft assembled and tasked to perform a specific function.

Theater Patient Movement Requirements Center (TPMRC)—Responsible for the coordination and requirements for patient movement from communication zone (COMMZ) to CONUS.

Time Out.—Common assertive statement used to voice crewmember concern when safety may be jeopardized.

Training Mission—Mission executed at the unit level for the sole purpose of aircrew training for upgrade or proficiency. Does not include operational missions as defined in this AFI.

Unescorted Entry List (UEL)—UELs are computerized lists of personnel authorized unescorted entry to aircraft to perform their duties. UELs are also categorized to indicate individuals authorized to escort personnel onto aircraft, and individuals authorized to grant escorted entry to the aircraft. UEL categories are published in AFI 31-101, volume 1, *The Physical Security Program.*

Unit Move—Unit relocation in support of a contingency or exercise deployment/redeployment. These moves are made to desired areas of operation or to designated locations, and are made IAW a troop movement schedule.

White House Communications Agency (WHCA)—A joint service field unit of the Defense Information Service Agency (DISA) which provides communications support for the White House.

WHMO—White House Military Office.

Zero Fuel Weight (Actual)—Weight, expressed in pounds, of a loaded aircraft not including wing and body tank fuel. All weight in excess of the maximum zero fuel weight will consist of usable fuel.

Zero Fuel Weight (Maximum)—The weight expressed in pounds where an addition to the aircraft gross weight can be made only by adding fuel in the tanks. This value is called "Limiting Wing Fuel" on the DD Form 365F, **Weight and Balance Clearance Form.**